

JUL 1912

JULY

# THE AMERICAN School Board Journal

A PERIODICAL OF SCHOOL ADMINISTRATION

## Seventh Annual School Equipment & Supply Number

The Selecting of Equipment for  
and the Planning of School Shops  
by W. A. Richards

The Purchase and Distribution  
of School Furniture and Supplies  
in New York City

School Furnishing in England  
by John Y. Dunlop

The Straight Line in  
School Seating  
by H. Bedford Jones

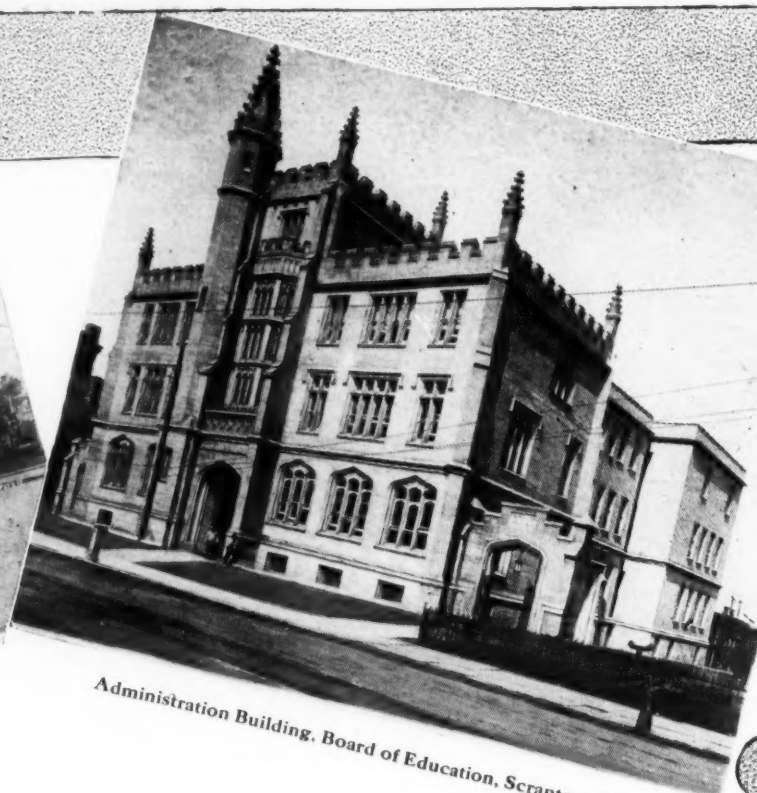
NEW YORK  
CHICAGO

WILLIAM GEORGE BRUCE  
PUBLISHER

MILWAUKEE  
WIS.



Beaver Falls High School, Beaver Falls, Pa.



Administration Building, Board of Education, Scranton, Pa.

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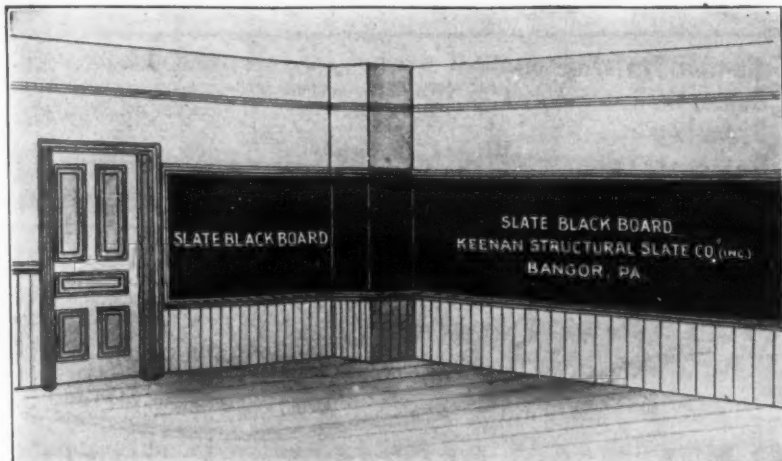


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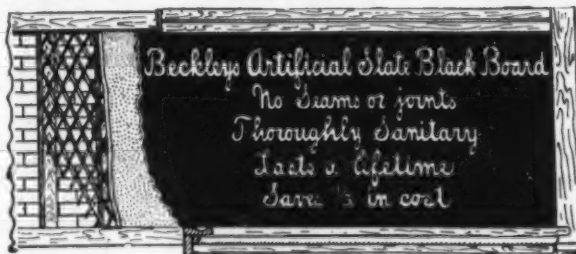
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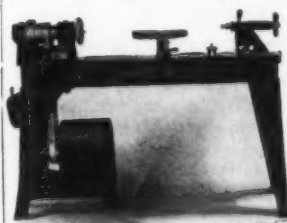
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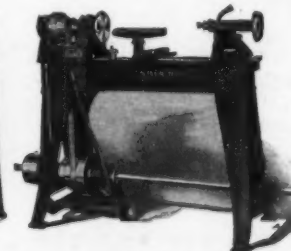
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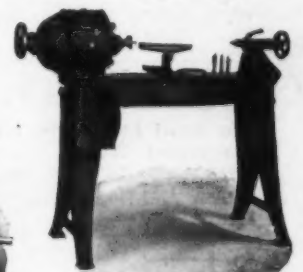
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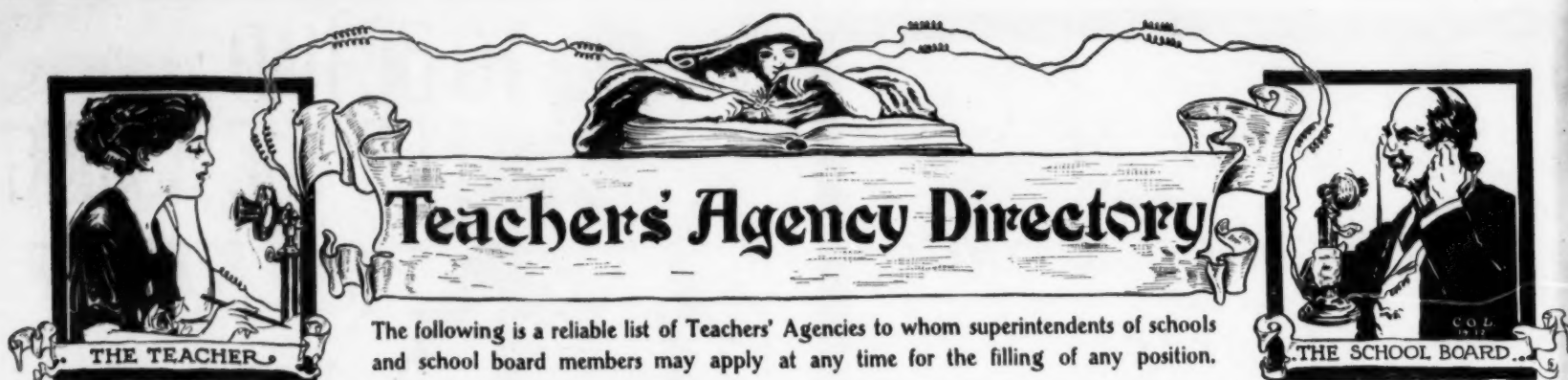
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(Continued from Page opposite)

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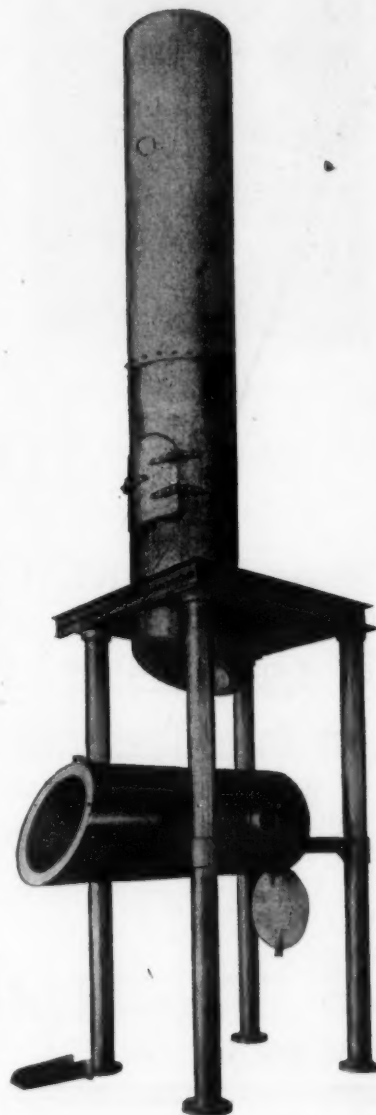


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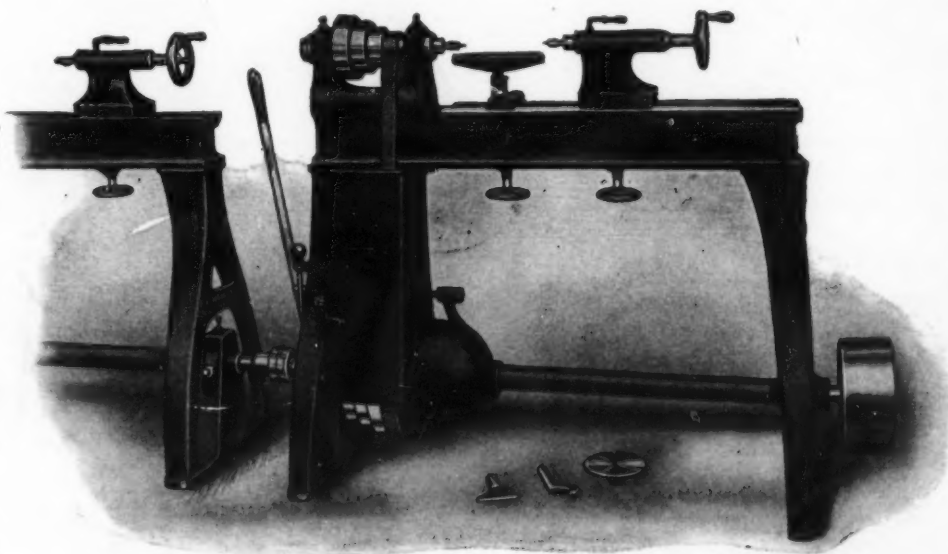


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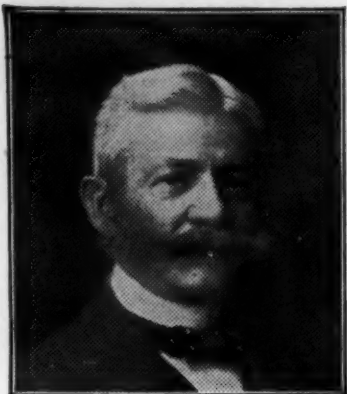
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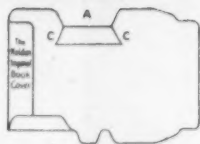


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Vol. 45

JULY, 1912

No. 1

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Patented June 30, 1903; Aug. 29, 1905; Oct. 25, 1910

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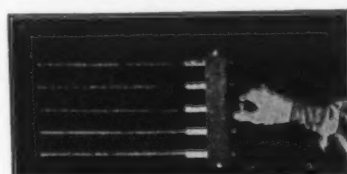
Obtained through the use of The De Pree Formaldehyde Fumigator.

#### EFFICIENT, CONVENIENT ECONOMICAL

All rooms in school building can be fumigated at the same time.

We will positively guarantee you satisfaction on a trial order. Fill out this coupon and mail to THE DE PREE CHEMICAL CO., HOLLAND, MICH., and receive free sample and information.

Name \_\_\_\_\_  
Address \_\_\_\_\_



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Easy to Handle.

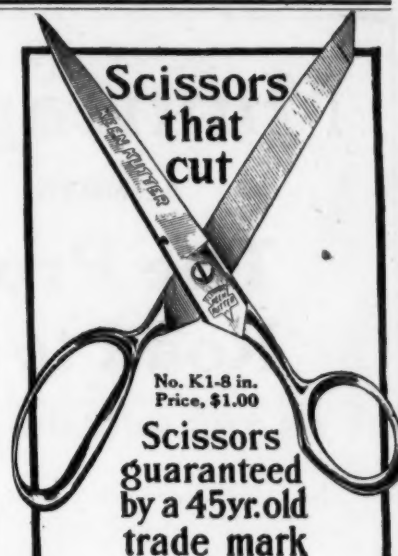
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Sent postpaid on receipt of 25 cents.  
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PECKHAM, LITTLE & CO.,

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Scissors guaranteed by a 45yr. old trade mark



For sharp edges, tight joints and long service Keen Kutter Scissors and Shears are unequalled.

It is difficult to tell the lasting value of scissors and shears from appearance. Your protection is the Keen Kutter trade mark. Be certain it appears on scissors and shears you buy.

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### Best Quality

### Natural Slate Blackboards

Blackboard Slate that is uniform in color.

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Blackboards that meet the exacting requirements for school purposes.

Write for list of schools where our blackboards are now being used, and any other information that you may desire, to

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### SLATE BLACKBOARDS URINALS :: CLOSETS

**Omega Slate Co.**  
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High Grade

### School Desks and Opera Chairs

Good Service . . . Right Prices

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### MENEELY & CO. WATERLOO, N.Y.

The Old Reliable Meneely Foundry, Established nearly 100 years ago.

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ADOPTS (June, 1912)

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The unparalleled success of these readers has been most gratifying. They have been adopted in nearly every State in the Union and have won hundreds of enthusiastic testimonials from teachers and superintendents.

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## Introductory American History

By HENRY E. BOURNE  
and ELBERT J. BENTON

*Professors of History in Western Reserve University*

A new book for the sixth grade based on the recommendations of the Committee of Eight of the American Historical Association. The purpose of the book is to teach pupils that our civilization had its beginnings far back in the history of the Old World, and to enable them to think of our country in its true historical setting. About two thirds of the book are given this introductory history, and the remainder to the period of discovery and exploration. About 280 pages, with maps and illustrations.

## Health in Home and Town

By BERTHA M. BROWN

*Author of "Good Health for Girls and Boys"*

This book continues the course begun in "Good Health for Girls and Boys." Its purpose is to emphasize the importance of sanitary surroundings in home and town, and to teach pupils while in school the principles that underlie attractive and healthful home making. Illustrated.

**D. C. Heath & Co., Publishers**

BOSTON NEW YORK CHICAGO



## The Wentworth-Smith Arithmetics



Some of their good points as brought out by a few of the teachers using them.

### Equip for all arithmetic work in active life

I am well pleased with the results secured from the use of the Wentworth-Smith Arithmetics. The topics studied are those relating to practical, everyday life. The explanations are clear, direct, and couched in simple language. The problems are simple and easily handled. The pupil who masters this book will find himself well equipped for all the arithmetic work which he will find in active life after he has left school.

C. H. DIETZ, Principal of Green County Normal School, Monroe, Wis.

### Produce better work in the classroom

We placed the Wentworth-Smith Arithmetics in every grade last September from the third to the eighth, inclusive. From the end of the first month I have heard nothing but favorable reports from teachers and principals, and have, myself, observed better work in the classroom than at any time before in the Peoria schools.

GERARD T. SMITH, Superintendent of Schools, Peoria, Ill.

### Adapted to the powers of children

After an experimental year to test arithmetics, the Wentworth-Smith Series was adopted for our schools with the unanimous approval of the teachers. They like these books because they are teachable and because the work is carefully adapted to the powers of the children.

MARY D. BRADFORD, Superintendent of Schools, Kenosha, Wis.

### Accuracy and reasonable rapidity

I like the lines upon which the Wentworth-Smith Arithmetic is built,—the effort to secure accuracy and reasonable rapidity, and the desire to avoid over-elaboration with objects in the primary grades.

EMILY F. WEBSTER, Department of Mathematics, State Normal School, Oshkosh, Wis.

### Even children recognize their good points

The Wentworth-Smith Arithmetics in our schools are all that we expected. My teachers are unanimous in their praise. It seems to me that this is the best thing that can be said of any book: that its good points stand out so prominently that even children in the sixth, seventh, and eighth grades recognize them.

JAMES T. BEGG, Superintendent of Schools, Ironton, Ohio.



**Ginn and Company, Publishers**

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## The National Education Association

In CHICAGO in July, to call at their offices, Prairie Avenue and 25th Street, where a full list of all their American publications will be on exhibition.



# School Board Journal

Founded March 1891 by WILLIAM GEORGE BRUCE

VOL. XLV, No. 1

MILWAUKEE—New York—Chicago, JULY, 1912

SUBSCRIPTION PRICE  
\$1.00 PER YEAR



THE VACATION SCHOOL VS. THE ALLEY.



# School Administration.

## HELPING BACKWARD PUPILS.

The greatest danger arising from the present agitation against the retardation of pupils in their progress through the curriculum has been that principals and teachers, under the pressure of the superintendent's office, would promote pupils who are unfit to do the work of the next grade. This problem, growing directly out of attempts to reduce the retardation evil, has received attention in New York City, where Superintendent Maxwell has insisted to his principals and teachers that the movement means only that every effort is to be made to render pupils fit for promotion. "Schools have been run too exclusively for the sake of the bright pupils," says Dr. Maxwell, in his annual report for 1911. "The dull pupils or the apparently dull have been allowed to shift for themselves. The only chance they had was to repeat the work of the grade in which they failed, and thus they lost valuable time. This policy must now be changed. The bright pupils must not receive less attention. The dull pupils, however, must receive much more attention. They must not be allowed to fail, if human kindness and teaching skill can prevent it."

The excellent results that have followed the work in New York City are shown by the fact that while the rates of promotion (exclusive of kindergarten classes) for 1909 and 1910 were 82.7 and 82.6 per cent, respectively, the rate for 1911 was 90.3 per cent. This means that approximately 40,000 more children were promoted each of the two times in 1911 than would have been the case had the earlier rates still prevailed. The average rate of promotion for all grades and all classes of the entire city was 88.6 per cent. A remarkable uniformity is shown in the rates for the various grades and it seems probable, according to Superintendent Maxwell, that little further increase in the general rate of promotion can be expected.

The increase in the ratio of promotion, in the special classes, has done much toward making possible this good showing. The rates for 1909, 1910 and 1911 were 78.2, 76.5 and 96.5, respectively.

In obtaining these splendid results, a number of effective devices have been employed for helping backward children. These include:

### Devices for Helping Backward Children.

1. Instruction before and after school hours.—To be successful, a definite plan must be consistently pursued. One of the most successful devices of this type had the following elements: (1) The teachers of grades five to eight report the names of pupils who are backward in language and number; (2) such pupils are furnished with cards and are notified that, if they desire to study in the morning before 9 o'clock, they may report at rooms designated on cards at 8:15; (3) each child's card is punched as he enters the study room by a teacher who volunteers to take charge; (4) at 8:40 the regular teachers visit the rooms to inspect the work accomplished and to give assistance and explanations.

2. Pupil teachers give one-half hour each day to each room.—While the pupil teacher conducts with the bright pupils a lesson which the regular teacher has carefully outlined the latter gives the backward pupils of the class special drill in subjects in which they are deficient.

3. Major subjects always taught by experienced teachers.—In order to prevent deficiencies in pupils of a class whose regular teacher is absent the assistant to the principal, an experienced teacher, gives the instruction in the major subjects, while the substitute takes the classes in the less important subjects.

4. Family study period.—The older girls meet the younger twice each week to assist them in their work.

5. Proper use of the study period.—Teachers are expected to spend entire time in helping and directing pupils, to prevent aimless study on the part of pupils, to have them use pen or pencil, as this helps them to concentrate attention and effort.

6. Combination of class and sectional teaching.—"The daily time assigned to a topic is, when necessary, divided into a class period and a sectional period. During the former, the class is taught as a unit, the teacher noting on a desk pad the points in which further instruction is needed and the names of the pupils requiring it. Unless additional explanations are required by the majority of the pupils, the correction of deficiencies is postponed to the sectional period. During this time the special pupils are aided individually or in small groups by the teacher, assisted by some pupils, while the other members of the class perform assigned tasks. The sectional period varies from day to day and from topic to topic in the different classes." "The plan is made to include all varieties of special pupils, those over age, those weak in all subjects, the foreigners bright in everything but English, and those who acquire knowledge more rapidly than their mates."

7. Special home work.—The home work is adapted to the special need of each pupil. That for "the class as a whole is made light, in order that pupils may have time for their individual work, which varies considerably."

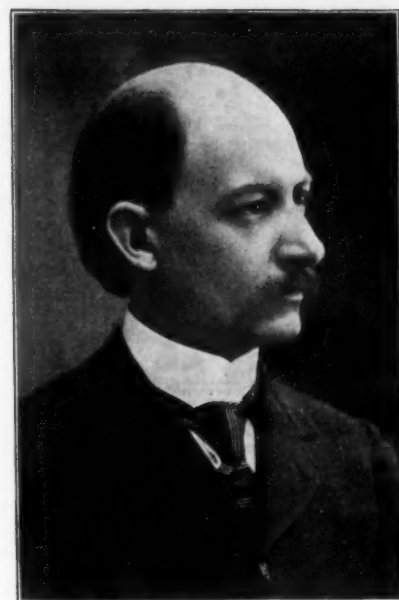
But the devices given above are not, in the opinion of Doctor Maxwell, the most efficient. He thinks "that more may be accomplished to redeem the backward through the general organization of the school than by any other means."

8. Classification of pupils according to their weakest subject.—When there are two classes to a grade, arithmetic and language are the basal subjects for classification purposes; when there are three classes to a grade, arithmetic, language, and manual training are so used. Teachers with special aptitude for teaching each of the basal subjects are placed in charge. Double time is given each basal subject.

Of this plan, Doctor Maxwell says: "I particularly commend the plan. It does not remove the dull pupils from the inspiring companionship of brighter pupils. It does not disturb a school by frequent reorganizations. It is free from the intricacies that too often beset school plans either for succoring the backward or rapidly advancing the bright. It has the supreme merit of simplicity, the merit that characterizes all great inventions."

9. Rapid advancement classes for slow, backward, and over-age pupils.—These classes pursue a course of study formed by eliminating certain subject matter from the regular course of study. The following principles controlled in the process of elimination: (1) Omit intensive treatment of any subject which, while it might lead to a higher degree of culture, presents great difficulties to a child of weak mentality. (2) Whenever a subject is treated from different points of view in different grades, omit treatment in lower grades. (3) Confine treatment of any one subject to a single grade. (4) Produce further economy concentration of method.

According to Associate Superintendent Gustave Straubenmuller children of weaker mentality should remain in such "rapid-advancement classes" throughout their entire elementary course, keeping pace with their fellows of normal ability. Associate Superintendent Meloney is of the opinion that approximately one-third of the pupils should be in some such form of special classes with expert teachers in charge. He says further: "All the pupils of our schools can not be taught and trained to efficiency upon



MR. J. M. H. FREDERICK,  
Superintendent-elect of Schools,  
Cleveland, O. (See Page 38)

the present course of study. Many of them are forced to attempt to do what they are incapable of doing, for which they have no aptitude, and in which they have no interest. The result is that many leave school as soon as possible, untrained and unprepared for the arduous duties of life."

### Open-Air Classes in Detroit.

Superintendent W. C. Martindale, of the Detroit public schools, is continuing to enlarge his movement for open-air classes as rapidly as funds are provided by the city of Detroit. This movement was inaugurated in September, 1910, when Superintendent Martindale issued a notice to all the principals of the Detroit schools, urging all the possible fresh air for the pupils so that the good work of a long summer spent in the country or on the school playgrounds might not be undone by close confinement in classrooms. He called attention to the report of the health department which stated that each year, when the schools are opened, the contagious diseases increase, due to the placing of children in rooms where, while they have the best sanitation possible, yet they do not live under natural conditions.

To carry out this work most effectively, he suggested that open-air classes be held. They were to consist of the regular recitations, to be held out-of-doors, on the school ground or in some shady spot near the school. Recitations have been held in arithmetic, reading, spelling, language, grammar, physical training and kindergarten work. During September and October of that year over 6,000 classes were held. Principals, teachers and children were alike in their enthusiasm over the work. They stated that the results of outdoor work was a continuance of the good health of the children at the opening of school. Superintendent Martindale believes that if children can be kept in the open air for a large portion of the time their health will not only be materially benefited, but that the open-air class may prove one of the strongest remedial measures in the cure of anaemic and tubercular troubles yet tried. During at least four and one-half months of the school year these classes have been held in the school yards of Detroit. The only equipment for them provided so far has been a set of fifty kindergarten chairs with which the schools have been provided. Last year the superintendent asked for an appropriation to build open-air pergolas open all around, with canvas top for protection against the sun and the rain. On account of the unusually large budget this estimate was cut out. This year a similar request was made and the sum of five hundred dollars was granted with which to build one pergola in order that a test might be made of its utility with the understanding that more will be erected later if it proves its worth.

The establishment of the department of should emphasize handling equipment also account of progress of Newark, and adopt for the efficiency of its affairs.

The increase in the work of variety of to carry on city schools this progress itself quite had to be done.

The department and the rule pointment his power under the committee the school board, and prepare proposals" during the delivering kind, and claim.

The school of the new building and all.

To on "school mean b and such the student's subjects. I the superintendent have a number teacher globes, and multiplies an office furniture, nances, cooking sals and strum.



# THE PURCHASE, DISTRIBUTION AND ACCOUNTING FOR SCHOOL SUPPLIES

By SAMUEL GAISER, Superintendent of Supplies, Newark, N. J.

The establishment and organization of a "Department of Supplies," whose field of activity should embrace the entire problem of purchasing, handling and delivering all supplies and equipment required for the public schools, and also accounting for the same, is one of the steps of progress made by the Board of Education of Newark, New Jersey, in its desire to promote and adopt business-like and progressive methods for the efficient and economical administration of its affairs.

The increasing magnitude and importance of the work of furnishing the large quantity and variety of supplies, which are now required to carry on the various activities in which the city school system is engaged, fully justified this progressive step, as the need had manifested itself quite clearly and the old order of things had to be done away.

The department is under the immediate direction and control of a superintendent of supplies, and the rules of the board, providing for the appointment of the superintendent and defining his powers and duties, require that "he shall, under the direction of the board and its several committees, purchase, and order all supplies for the schools and the several departments of the board, and keep a duplicate of his orders, \* \* \* prepare specifications and advertise for proposals" for various kinds of supplies required during the year, have charge of receiving and delivering all furniture and supplies of every kind, and certify to the correctness of all bills and claims.

The scope of activity includes the purchase of the entire furniture and equipment for all new buildings as well as additions, replacements and all material for current use.

To one unfamiliar with the details, the term "school supplies" is generally understood to mean books, paper, pencils, pens, ink, chalk, and such other articles as the school boy uses in the study of the three "R's" and kindred subjects. It might be of interest to state here that the supplies purchased through this department have a variety far beyond that stated above, a number of which I will name: pupils' and teachers' desks and chairs, textbooks, maps and globes, paper, stationery, blank books, sewing and millinery supplies, printing, laboratory supplies and apparatus, chemicals, medical supplies, office furniture, auditorium seats and stage furniture, pianos, typewriters, gymnasium appliances, wardrobe lockers, domestic-science or cooking tables, gas ranges, etc., kitchen utensils and dishes, draughtsmen's and artists' instruments and materials, paints, oils, brushes,

etc., special chemical, physical and biological laboratory tables and cases, drawing tables, work benches, library furniture, window shades, lumber, hardware, iron and steel, brass and copper, mechanics' tools, janitors' supplies, material for steam fitters and plumbers, boiler fittings, electric motors and fittings, iron and woodworking machinery and hand tools, foundry supplies, printing presses, type, etc., coal and wood, water, electric current for light and power, and even fire insurance policies; for special schools, steamer chairs, sleeping bags, reefers, leggings, rubbers, caps, sweaters, blankets, etc., and food.

A general statement relative to the organization and equipment of the Department, its methods and operation, and its work is here-with presented:

## Organization and Equipment.

Involved in the problem of securing and furnishing supplies are the details of purchasing, ordering, receiving and delivering, inspecting, auditing and accounting, and the department is organized substantially on this basis. This does not mean, however, that the office force is divided into these respective branches, as a general plan carried out by the harmonious employment of the entire department accomplishes the results desired.

In addition to the general office furniture, we maintain a catalog cabinet which has proved to be an invaluable aid. Hundreds of catalogs are numbered, filed and indexed, and the benefits derived, in convenience, lack of annoyance and time saving, have justified the investment many times over. A central storeroom or warehouse is an advantage that will commend itself to anyone having supervision or control of this department of school work. Material, which is furnished by local contractors and delivered by them to the schools, can then be secured in bulk and at correspondingly lower prices. Not only is the investment warranted from the standpoint of economy, but also because of greater efficiency and better service to the schools.

Thorough and complete filing systems are essential. Requisitions from the schools, receipts for delivery, charge slips, duplicates of invoices, specifications and correspondence must be promptly located when needed. The proper care and handling of the many forms in use avoids innumerable petty annoyances and simplifies the work to a remarkable degree.

## Methods and Operation.

The purchase of supplies for public institutions is a subject that has received more or less attention in the press during recent years, and,

while there may be a just difference of opinion as to the merits of competitive bidding as compared with direct purchase without competition, the advantage to all concerned lies with the former method, not only in that it protects the taxpayer from exorbitant prices, but it also frees the purchaser from unfair criticism. The responsibility for obtaining full value for the money expended rests, however, with the official approving the claim, and his insistence that the contractor comply with the requirements of the specifications invariably produces satisfactory results.

The policy of the Newark board to contract for its supplies on the competitive bidding basis is consistently carried out by the department. Under the requirements of the New Jersey law, no contract for supplies may be awarded for a sum exceeding \$250 without public advertisements for bids. To obtain bids by public advertisements, for supplies costing less than the amount stated, does not result in the economy that common business prudence would dictate, in that the expense for advertising runs from twelve to fifteen per cent and over on such small amounts. Proper consideration of this factor of expense in procuring bids has led to the conclusion that the department should arrange to withhold advertising until sufficient supplies are required to warrant this expense. It is therefore our custom to list, under proper specifications, the standard supplies required during the school year, and to advertise for estimates and prices previous to the beginning of the year. In the advertisements published in June, 1911, about 2,000 items of various kinds and sizes were involved.

In a large city system, it is impossible to anticipate all the requirements in advance, and frequently supplies or equipment are called for on which no bids had been received at the beginning of the year. It becomes necessary, therefore, to again advertise or, if the amount involved is small, to obtain estimates from several reliable dealers. The competitive system is thereby maintained, and unnecessary expense is avoided.

## Specifications for Supplies.

The preparation of specifications in so diversified a line of activity is worthy of study in itself. The general terms, indicating when and how proposals will be received and opened, that they must be sealed and indorsed on the outside with the name of the bidder and the article or class of articles or work on which the bid is made, seem simple enough, but frequently bids are desired from firms hundreds of miles away

*Belmont Avenue*

1912		APPROPRIATION ACCOUNTS							GRAND TOTAL			
		Text Books Maps, Etc.	Stationery	Paper	Occupation and Recreation Books	Miscellaneous	TOTAL	Cooking	Sewing	Miscellaneous	GRAND TOTAL	
June 4	20 Natural School bags	20										
	16 cone Memo B Paper			1.30								
	12 doz Eagle brand 2 Pencils		1.75									
5 000	1 - Scissors 4" ad. for				2.35							
	1 Undipped Typewriter Ribbon					1.1						
8 List	Kitchen Utensils as per list							1.0				
000	50 Sewing Books								1.75			
14	12 rolls Bandages 2"									36		

Form E

FORM E. Ledger account showing Distribution of Supplies furnished to Schools by which exact cost of every building can be recorded. Original book has leaves 17 1/4 inches wide and long enough to record all deliveries for a school year.



BOARD OF EDUCATION  
DEPARTMENT OF SUPPLIES  
Newark, N. J., June 4th 1912  
A. S. B.

Please supply the Board of Education with the following  
and charge to Text Books account.  
Deliver to Ed. of Ed. Depository, City Hall.

30 Caesar - Kelsey  
18 German Reader - Brandt  
12 Latin Grammar - Bennett  
12 Laboratory Exercises - Brownley-Fuller,  
etc.

**COPY**

(Original Requisition)

No. 14616

Superintendent of Supplies.  
All bills must be rendered before the 15th of each month, and must be made out in duplicate on blank forms which will be furnished on application.

FORM A. Order used in Buying Supplies (see text).

with no authorized agency in the immediate locality where the bids are to be received. This situation is met in Newark by specifying that bids may be sent, properly addressed, by registered mail or special postoffice delivery, but the board assumes no responsibility for their delivery on time.

The requirements for delivery of material vary greatly according to the nature or character of the article to be furnished. In the case of staple articles, five to fifteen days from the date of the requisition should be sufficient. In other cases calling for equipment to be manufactured and installed, the time allowed may extend from one to four months. Penalty for failure to complete or deliver also varies from reserving the right to cancel orders and obtain the supplies from other parties at the expense of the contractor, to deducting \$10 to \$20 per day as liquidated damages. In one case, that of coal, the dealer who fails to deliver promptly may be denied further orders. We have practically no trouble with coal dealers. They all want as many orders as they can get.

Another clause in the specifications concerns

Form 418  
This blank is to be used as a receipt for the delivery of the items on the accompanying order, and when properly filled out and signed by the principal or some one in authority, must be returned with bill to the Department of Supplies, Board of Education.

Order No. 1562 Newark, N. J., JUN 4 - 1912  
Franklin School

Received in good order from  
Joseph Brown & Co.

1. Roll-top Desk # 585  
1. Revolving Office Arm Chair # 742

**Form B**

W. E. S.

FORM B. Receipt used by Contractor in Delivering Goods directly to a School or to the Depository.

the surety required with the proposal. This is either the written consent of a surety company, a certified check or cash, the amount usually being a small percentage of the total of the proposal. Where no fixed total of the bid can be determined, the amount of security is fixed by the specifications. The surety company signing the proposal must execute the bond jointly with the contractor for the faithful performance of the contract.

While the above are important conditions of any set of specifications, it is essential that the other requirements, with respect to the character, quality, size and definite description of the material to be furnished or work to be done, shall be as explicit as possible, leaving no loophole for complications or misunderstandings after the contracts have been awarded or the work or material furnished.

In connection with the matter of specifications and bids, it might be interesting to state that, so far as I know, no city other than Newark has undertaken to secure competitive bidding for fire insurance premiums on its school property. Yet for the last two years, bids of this character were received by our board under specifications clearly defining just what was wanted, and bidders had no difficulty in understanding our requirements.

After the preparation of specifications, the securing of bids and estimates and the award of contracts, the department is then interested in the method to be pursued in obtaining the supplies required, their inspection and approval, and the final certification of the invoices.

#### The Handling of Requisitions.

Verbal orders are tabooed and written requisitions are the rule. These are issued in triplicate, the original going to the contractor, the duplicate remaining in the office and the triplicate being sent to the stockroom and place of delivery. In addition to the usual information necessary on all requisitions, the form in use shows the ledger account to which the material called for is to be charged. This facilitates the work of the department by indicating to the contractor the particular requisitions that are to be covered in one invoice, so that the invoice may not contain items that belong to several different accounts. The stub of the requisition (of which only the duplicate is used) shows the number of the school or other department order to which it relates and affords a means of identification and ready reference, and also, such further information as may be necessary to show how material intended for stock or for different departments when listed on a single requisition is disposed of. The items on the school orders, etc., are checked with the numbers of the office requisitions on which the particular items are listed. (See form "A.")

Contractors are, in every case, required to file with their invoices receipts showing the delivery to the schools of the supplies for which they render a bill. (See form "B.") The receipt of supplies in the stock room is certified to by the clerk in charge and from the triplicate copy of the requisition. The invoice in duplicate is then carefully checked with the receipts, with the duplicate copy of the requisition, and with the contract or estimate prices before the same is approved. Under this system, it becomes practically impossible for a duplicate charge to pass through the department.

The depository or stockroom, in which material is received in bulk, is operated in practically the same way, and is dealt with in the same manner as if it were a supply house. No material is sent out by the clerk in charge without a "Depository Delivery Order" (See form "C"), and each package delivered to the schools is accompanied by duplicate receipts (See form

School Order No. 126  
Charge D. D. O.

BOARD OF EDUCATION  
DEPARTMENT OF SUPPLIES  
Newark, N. J., June 4th 1912  
A. S. B.

Please supply the Board of Education with the following  
and charge to Text Books account.  
Deliver to Ed. of Ed. Depository, City Hall.

30 Caesar - Kelsey  
18 German Reader - Brandt  
12 Latin Grammar - Bennett  
12 Laboratory Exercises - Brownley-Fuller,  
etc.

(Duplicate of Requisition)

BILL CHECKED JUN 24 1912

No. 14616

FORM A. Duplicate of Order (Triplicate is similar to Original).

"D") showing its contents. The original is signed by the party receiving the goods and returned by the driver to the stockroom. The duplicate is left with the goods so that, as soon as convenient, the principal may verify his receipt and report any errors or shortage, and it also avoids delaying the driver.

We are not, however, free from such things as "complaints" though they are comparatively few. Lack of attention, over-confidence and

FORM 419  
BOARD OF EDUCATION  
NEWARK, N. J.  
DEPARTMENT OF SUPPLIES

DEPOSITORY  
DELIVERY ORDER NO. 3840 June 4 1912  
By J. B. ACCT.  
DELIVER TO Barringer High School

SCHOOL ORDER NO.	QUANTITY	
126	30	Caesar - Kelsey
	18	German Reader - Brandt
	12	Latin Grammar - Bennett
	12	Lab. Exercises - Brownley-Fuller, etc.

**Form C.**

PUT UP BY W. E. S. 6/4 1912

FORM C. Depository Delivery Order used in sending out Supplies to Schools. Made out in duplicate.

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carelessness are always factors to contend with. One case, among others, occurred in which a principal complained that he had not received a certain package for which he had signed a receipt. It was a fair sized box containing paper, and the only item on the receipt. Impossible for him to miss it, you would say. We insisted that delivery had been made, and the box was afterward found in one of the schoolrooms. The excuse given was "we didn't know the case was here."

In the installation of special furniture and equipment, the department assumes all the details, and certificate of delivery and satisfactory completion is obtained through inspections made by the department's representatives who are familiar with the requirements of the contract and specifications.

#### School-Supply Accounting.

There is an increasing interest throughout the country in the matter of accounting for the cost of school equipment, maintenance and operation, not only to obtain a more uniform basis upon which comparisons may be made between different cities, but also to determine whether the enormous investment in school property is returning dividends in the way of opportunities for culture and for social and intellectual advancement that the community should reasonably expect.

The Committee on Uniform Statistics of the Department of Superintendence and the National Association of School Accounting Officers, together with the Bureaus of the Census and of Education at Washington, have formulated financial reports requiring a more definite and accurate division of school expenditures among the various activities in which public educational systems are now engaged.

These reports are comprehensive, and indicate that the organizations mentioned are alive to the importance of solving this difficult and intricate problem. The subject is a study in itself, and while it is closely related to the matter of supplies, space will not permit of elaborating upon it in this article.

In order that our board might be enabled to determine more definitely in what branches of the service the cost of maintenance is increasing or decreasing, we have, in the matter of supplies, inaugurated a system of accounting which shows, in greater detail than formerly, the cost of instruction, operation and maintenance for each school, and also totals by classification of the various kinds of schools and other activities. (See form "E" for educational supplies, the entries on which are made from the department requisition and Depository Delivery Order.)

There are several factors involved that require adjustment, and which will no doubt find their proper level in due time. It is sometimes difficult to determine between what legitimately should be charged to equipment, and which should not be included in the average annual cost for maintenance, and the general supplies furnished to meet the needs of the current year only. With consumable material there is no difficulty; textbooks used by the pupils can, with reason, be charged against the annual cost, but books for reference or for libraries, whose usefulness extends over a period of ten years and more are in the nature of educational equipment, and do not logically enter into the average cost for any one year, except possibly on the basis of a percentage determined by their probable length of service. This reasoning is particularly applicable to small hand tools used for industrial training on which there is wear and tear but no change in character, and which do not outlive their usefulness except after a number of years. It is possible, however, pending a more detailed and definite application of

Form D  
14193 *Larringer High School*  
Newark, N. J. 6/4 1912  
School Order No. 126  
Received in good order from The Department of Supplies,  
Board of Education.

30 Cassas - Kelsey  
18 German Reader - Brants  
12 Latin Grammar - Brants  
12 Laboratory Exercises  
Crownley - Fuller  
etc.

Form D

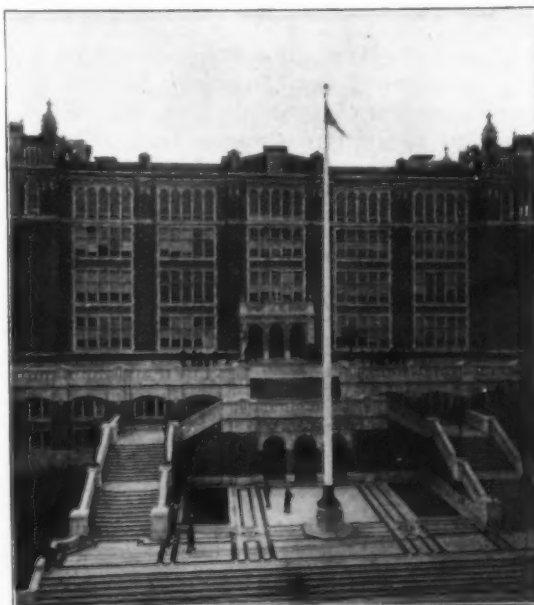
H. E. S.  
Principal

FORM D. School Receipt signed in Duplicate by Principal  
Original is returned to Depository, duplicate  
is retained as record and checking list.

the theory above outlined, and putting it into a practical working system, to so differentiate between equipment and ordinary supplies as to obtain general results which are approximately correct.

#### Budget Making.

The item of first importance in the matter of annual expenditures is the preparation of the "budget," which is one of the problems that requires the attention of the department previous to the beginning of the school year, and is a matter of interest to the taxpayer and the board alike. This has been established upon a basis whereby it can readily be determined why the several amounts asked for are needed. Estimates for the equipment of new buildings, which it is expected will be ready for occupancy during the year, are made by this department, which also estimates on the amounts needed for new and additional equipment in existing buildings and all other general supplies. The thoroughness with which the estimates have been prepared and the care exercised by the board in eliminating such items as are, for the time being, deemed unnecessary for the efficient administration of the schools, have invariably met



Terrace and Main Entrance, Central Commercial and Manual Training High School, Newark, N. J.

with the approval of the Board of School Estimate, which finally determines the amount to be appropriated.

The budget for educational supplies is largely determined on the basis of a fixed rate per pupil allowed by the rules of the board. Other items are governed by the expenditures of the previous year. Equipment for new buildings is estimated on a basis which has operated very satisfactorily. The modern elementary school buildings contain certain kinds of rooms for which there is standard equipment, and knowing the cost of furnishing the various kinds of rooms provided, it becomes a matter of detail only to determine the amount of money necessary.

High-school equipment is a different problem and depends upon the character of the school to be maintained. It is therefore a subject for special consideration. There is one point in this connection, especially with relation to commercial and industrial schools, that deserves mention. The cost of equipment is not altogether dependent upon the capacity or the number of students to be accommodated. The machine shop or commercial study room, equipped for a class of twenty-four, will suffice for forty-eight or seventy-two students when used alternately in two or three divisions. Consequently, while apparatus must be provided for one class as a unit, the number of students using the same is limited only by the capacity of the building and the time allotted to the study of each subject. Outside of the ordinary equipment, it will cost almost as much for a high school accommodating 600 students as it will for one accommodating 800 to 1,000 students.

In conclusion, permit me to suggest that while the problem of furnishing supplies is a dry and uninteresting one, it still affords a large field in which to show one's individuality. The style, character and quality of school furniture can reflect the care or interest which the department may have in the successful yet economical administration of the system. The furnishing and hanging of window shades to obtain a satisfactory distribution of light in the classroom so that it shall not be harmful to the eyes of the pupils, the purchasing of paper and similar material which shall be suitable and yet inexpensive, and many other problems of like character all tend to make the work interesting and relieve it of the drudgery associated with the cold business proposition of buying and selling. While every effort is made to obtain supplies at reasonably low prices, it is the policy of the Board of Education, through this department, not to take advantage of an error on the part of the contractor or dealer, but to treat all in a manner that is fair and just, requiring no more nor less than the contract or specifications call for. This policy is justified by results. The school system is considered a good customer and the merchant and manufacturer are anxious to please. Even the rejection of materials, which are deemed unsatisfactory by the department, is accepted without dispute. As stated earlier in this article, the responsibility for obtaining full value for the money expended rests with the official approving the claim, and the reliability and integrity of the department's officials and employees are assets that should be conscientiously and carefully guarded.

Experience is a great teacher, but by the time it hands man a diploma he is too old to make use of his knowledge.

Don't wait for the first day of school to turn over a new leaf. Today will do just as well—in fact better.

Ability is what a man can do; reputation only what others think he can do.

Always to agree with the members of your board is one way of not standing well with them.

The school report is one place where flowing language should be nipped in the bud.



# THE STRAIGHT LINE

By H. BEDFORD-JONES

I am strongly inclined to suspect that Mrs. Ella Flagg Young, of the Chicago schools, is a very remarkable woman, because she is that rare paradox—a practical philosopher. That she is practical needs no demonstration. That she is a philosopher was demonstrated by her recent utterance: "All school desks are made the same height, but all children are not the same length. \* \* \* Some people have too fine an idea of symmetry." For that is the keynote of Nature herself.

That spinal curvature is largely caused in schools is a very old statement. That spinal curvature is the result of symmetry is a very new statement. It is new because it is as old as the world. Nature did not know the meaning of symmetry until man invented the Italian garden. She made her forest trees crooked, with branching arms and rough knots; man cut off the arms and smoothed down the knots, and made the trees into masts or telegraph poles. But Nature was right.

Mrs. Young's claim is very startling because it is so very obvious. She declares that the symmetrical arrangement of desks, window shades and other items of school furniture is pleasant enough in effect, but very unpleasant in its effects. There is, in Chicago at least, a school law requiring that no pupil shall be placed more than a given distance from a window, according to the height of the window. This is to ensure that each pupil shall receive his full quota of light and air. But when one window shade is pulled down to shut off sunlight, the others are likewise pulled down to shut off untidiness, and are usually left so. Must we make laws regulating the pulling of a string?

## Spinal Curvature Caused in School.

This, however, is incidental to the subject of school desks. It has been preached for a very long time that Nature abhorred straight lines, but for some mysterious reason it has not been preached that school teachers should abhor straight lines. Education has not taken the hint given by Art, and the result has been the unjust charge that ninety per cent of spinal curvature not caused by inbred bone disease, originates in the public schools.

Unjust as a charge, not untrue as a statement of fact, for I would not question Eulenberg's veracity. But it is manifestly unjust for us to lay this condition at the door of the school desk manufacturers, because merchants invariably act on the principle of merely giving what is asked for. It is manifestly unjust to give the blame to school teachers or to school boards; we cannot blame a person for not seeing the little obvious things under his nose, because the obvious is always the most artfully concealed from us all. The only logical recipients of censure are we ourselves, as individuals.

Every school board has wrestled with this problem of desks and seats. Because of its very simplicity it has not been solved with any great success. The members of each board have filled their heads with rows of figures and statistics regarding the height and width of the seat, the length of the pupil, the distance between seat and desk, and so on. Every board member gains some idea of what is required, and then the devil of symmetry pops up, like Punch appearing from behind the curtain.

Spinal curvature as caused in schools has been the basis for a great deal of investigation and writing. The National Congress of Mothers has discussed it at length, and like most national congresses has shot wide of the mark. Some years since, Dr. Scudder, among other conclu-

sions, said that "the chair should permit easy contact of the whole sole of the shoe with the floor," and recommends that the children be made to sit upright by placing the seat nearer the desk. Now, you cannot make a child sit upright; you may tell him that he will be more comfortable thus, but he feels the constriction and resents it. You can bring up a tree as you wish, by the use of ropes; you can only bring up a child by cutting his ropes.

## European Studies.

The evil is not confined to our own country. In 1907 it was found that nearly fifty per cent of the younger boys at Eton had the lateral-curved spine. Germany has been alarmed for a long time. The English have gone about remedying the evil in various practical, near-sighted ways. The Germans have gone about it in scientific, microscopic ways. Americans must combine philosophy with practical science, it seems.

Dr. Cromley finds that there is a predisposition to curvature in many cases, and he would deal with such cases—and in fact all cases—from the exterior, by means of rest and exercise. But children do not come to school for rest and exercise; those are exactly the two things for which they leave school. Being an Englishman, Dr. Cromley suggests that each pupil should have an individual desk, adjusted to his growth, and that physical examinations should watch over the pupil constantly.

Any real physical examination involves following the child from month to month and year to year. It also involves the constant care of the teacher in seating the children, regulating the atmosphere in all ways, and in reporting to the physician. But the teacher has quite enough to regulate and report without dipping into medicine. Individual desks are beyond consideration in practice.

In so far as the height of a desk is concerned, many cities today use adjustable desks. This is a remedial measure, but no form of seat will obviate the evil of long continuance in one position. The child must be freed. Therefore some schools have gymnastic exercises after each recitation. This, too, is working from the exterior. The mere fact that we tell the children how to exercise and balance their muscle-work, shows that we are aiming at the effect and not at the cause.

## Uniformity vs. Uniformity.

The public school is the public trust. We may be lax about who we put into other public offices, but we keep a close eye on who goes into the board of education, and this branch of the public service is seldom ill-served. In turn, the board is careful about its teachers, and each of these last naturally desires to stand well with all visitors. That is the evolution of school room symmetry, so painful to young eyes.

I do not decry the neatness which must be natural to every schoolroom, but I do decry the

neatness which must be unnatural to every schoolroom, and which so often is. It is this spirit of neatness which has prevented adjustable desks being installed in many cities. It is this spirit which impels the teacher to keep all the blinds alike. It is this spirit which gives many a child an insane impulse to destroy it. Not that the child often obeys the impulse, but it is there all the same.

We teach the children to sit alike, while writing, their left arm holding the paper on the desk. This is largely blamed as the cause of curvature, for very few children are fitted to their desks and must perforce "hump up" their left shoulder, in assuming this position. A very obvious and therefore unthought of remedy would be to provide stationary holders for pad or slate, so removing the cause; but unfortunately this is not the only cause to be removed.

The space required between the back of the seat and the desk runs on a scale, from primary grades to high school, of from nine to thirteen inches. Many a child has even more room to fill, when he leans over to read or write. If he sits back, as he should do, he is too far away from the desk. Sometimes he must sit on the front edge of his seat. Always he must lean over the desk, which is a bad thing. The proposed remedy for this, namely, of moving the seat nearer the desk, would certainly make the child sit upright; but it would also cramp his actions to some extent, which is a very illogical action. A logical remedy is not always a logical undertaking.

## Fitting Desk to Child.

Special desks have been devised, none of which have proved quite satisfactory. So far it would seem that the individual desk proposition was the most logical and impractical suggestion. The law is laid down that the difference between the height of seat and desk should equal the length of the pupil's forearm, or one-sixth of his height. That is like saying that every article, furniture or otherwise, in the house we live in, should be proportioned to our individual dimensions. It is undeniably logical and undeniably impracticable.

A schoolroom might very well be fitted with, say, three different sizes of desks. This is occasionally done, but more often is objected to, usually on the ground of symmetry. I admit that it is a very nice thing to have a schoolroom that looks uniformly straight; but it is a very much nicer thing to have a child that looks uniformly straight.

The ultimate remedy, perhaps, lies in the inherent restlessness of the child. We provide him with a stiff, uniform seat and expect him to adapt himself to it. In nearly all our schools we are coming to adapt the studies to the child; why should we not adapt the seats and desk to the child?

We must fit ourselves to him, so far as that is practicable. We attempt to curb his restlessness, and as a result our teachers are driven wild by the natural opposition of a child. We cannot chain a potential man or woman. We must give that restlessness acceptance, liberty to wear itself out, just as we do in the kindergarten with the younger children. I am not advocating the introduction of anarchy into the school; I am advocating the introduction of the school into anarchy, for that is very often what a child's mind is.

Today we encourage by repression. We should discourage by expression. This has to do with spinal curvature in that if we gave the child a

(Continued on Page 71)

## A Recipe for Education

To infinite patience add a little wisdom, carefully strained through profitable experience. Pour in a brimming measure of the milk of human kindness, and season well with the salt of common sense. Boil gently over a friendly fire made of fine enthusiasms, stirring constantly with just discipline. When it has boiled long enough to be thoroughly blended, transfuse it by wise teaching to the eager mind of a restless boy and set away to cool. Tomorrow he will greet you an educated man.

—EDWIN OSGOOD GROVER.



# THE SELECTING OF EQUIPMENT FOR AND THE PLANNING OF SCHOOL SHOPS

By W. A. RICHARDS, University of Chicago

It is nearly always with a chip on my shoulder that I take to using these columns.

Now it is the question—Why do school boards and superintendents of schools place so much faith in the architect and so little in the shop teacher, when it comes to the selecting of the shop equipment and the planning of its arrangement?

To a large extent the school board is usually composed of successful business men—merchants, manufacturers, and the like. Now, may I ask, Mr. Merchant, if you were having a store building designed for yourself, would you have Mr. Architect select the stock of goods that you were to place in it, or would you have your buyer do it? Coming nearer home, would you, Mr. Manufacturer, allow Mr. Architect to tell you that you should have such and such a lathe because its lines were more graceful and will harmonize with the surroundings better, or that your boring mill should be set in a corner of the foundry because there is a space that needed filling, or that you should have a 27-inch cupola when you needed one that would turn out 100 to 200 tons of castings a day because the larger one looked out of proportion to the other equipment? Would you, Mr. Superintendent, allow Mr. Architect to select your textbooks? No! You would all hold up your hands in horror at the thought of it and very emphatically say *no*. But, this is exactly what you are doing with the school shops entrusted to your care, and with the man you have selected to use them.

## The Architect and the Shop.

I have noticed this condition of affairs nearly as long as I have been engaged in teaching shopwork. I have been told repeatedly by other shop teachers, "I wanted so and so, or I wanted this placed this way, but I could not get it as the architect wanted it this way because it looked better or more artistic, or the principal objected for this or that reason." It was only the other day that a shop teacher in a new high-school building which has just been completed in one of the suburbs of Chicago at a cost of something over \$200,000, came to see the small trunnion cupola that I have been using for the past three years in my foundry, and which I know, from having used both it and large ones, is far the best for school use, both economically and educationally. After I had shown him the cupola and explained why it is the best and most desirable for school use, he said substantially this: "I have been teaching shopwork for ten years and can see wherein you are right, and think that the small one is the one we need, but I am afraid that we shall not be able to get it, as the architect thinks we should have a large one, and I am afraid that settles it."

This same teacher told me that when the plans for the new building had been drawn up the machine shop was discovered to have been forgotten, consequently another room was divided to make a place for it, the result being a room 35 feet long and much narrower. In this room the architect expects to put a bench across one end, and a row of six engine lathes along one side, reserving the rest of the space (which is far too small) for the other machines. The bench and the necessary aisle will take off at least five feet from the length of the room, leaving not over thirty feet in which to place the lathes. The shortest beds on lathes, with a swing suitable for a school shop, are all five feet or more, which will make the lathe measure, over

all, not less than five feet six inches. This means that if the lathes were placed end to end, just as close as they can be put, that they would call for three feet more space than is possible to give them. Even if extra short lathes are obtained (at an extra cost) as I understand is the plan, there is not going to be room for the pupil to change the gears for thread cutting. Of course, we can anticipate Mr. Architect's answer, which will be that we are going to use all new style quick change gear lathes. This only goes to show that he does not know the first thing about educational shopwork, for with this type of lathe the pupil loses one of the most beneficial things that can be gained from a machine shop course, namely, training in the practical mathematics and mechanics gained by figuring out his gear changes for the threads that he will have to cut.

## Examples of Bad Arrangement.

Again, coming back to my own experience and observation, while I have not been in all the school shops in the country, I have visited a good many and must say that I have seen but two forge shops where the anvils were placed in the correct position, or in a position for most convenient use. I wish to cite one school in the shops of which there is hardly one thing that can be said to be correct. The wood shop occupies about half of a very large building. This shop is in reality two large rooms, one devoted to bench work and the other (intended for pattern work) to bench work and turning. Connecting these two rooms is a large machine room containing a circular saw, a band saw, and a planer. These machines are so located that the instructors in the shops cannot watch the machines or the pupils in order to guard against accidents. The planer is so placed that a full length board cannot be run through it. The machinery is all driven by one motor, so that if a small board is to be sawed on the band saw, power enough to run the whole plant and all the line shafting must be used.

Coming to the foundry, we find molding brackets (large, solid iron affairs) all placed at the same height, and not adjustable, though the pupils range in height from less than five feet to over six feet. Because of the solid tops all the sand not falling in the flasks must stay on the brackets, thus interfering with the pupil's work, or the fallen sand is pushed to the floor and trodden under foot. A much cheaper bracket and one far superior could have been made that would provide for adjustment to the height of the pupil and which also would direct most of the fallen sand away from his feet. The cupola has a fine, big operating platform, but all of which is on the side away from the charging door.

In the forge shop, which is a room fully twice as large as needed, the anvils are placed so close to the wall that it is impossible to swing a sledge hammer, without hitting it. The forges are so close to the anvils (which are set incorrectly) that a piece can hardly be taken from the fire and placed over the horn for welding.

The machine shop is scarcely better, as in this room every machine is in such a position that the operator stands in his own light. The machines could have been arranged the other way just as easily and cheaply. Also, if one wishes to do nothing more than grind a chisel he must run the shafting for half the entire shop, and likewise the use of one lathe necessi-

tates the use of the shafting for the other half of the shop. Of course, this is better than running all the shafting.

## Two Unsatisfactory Methods of Planning.

These instances could be multiplied indefinitely if time and space would permit, but I still have two other bones to pick: first, that the firms which supply the equipment are allowed to make the layouts, and, second, that principals and superintendents (not specialists in shop work) attempt to put into effect hazy ideas which they have obtained from hasty visits to other shops. While this first procedure is usually not quite so bad as when the work is entrusted to the architect, still it is open to severe criticism, for but few, if any of the men employed by these companies, know anything about school shops from any other than the salesman's side and make their plans from ideas obtained by casual glances at shops where they have been to sell goods. The practice of having principals and superintendents select school-shop equipment and direct its disposition is also open to serious objection. I have shown principals and superintendents through my shops—I suppose a dozen each year, and the way they grasp ideas is marvelous. They take in things so fast that in passing through the shops their feet hardly touch the floor, and yet they go back (with a muddle of half a dozen shops in their heads and a few notes in a book) prepared to tell how a shop should be laid out and what size and kind of machines should be bought.

Now, what does all this mean? Simply this, that there will be an illy equipped, poorly laid out shop, in which a teacher who knows all about shops and shop equipment is to work, and worst of all, to make good. With his equipment so poorly adapted to the work or so badly placed, he will find himself so handicapped that he cannot do this or that piece of work which he desires to do or is required to do. And he will either lose his position or get so discouraged in trying the impossible that he will resign, hoping to find a place where things are right, only to find the same old story over again; meanwhile the taxpayers get disgusted with shop teaching that reaches nowhere and means nothing.

## Expert Planning Best.

Now, School Board Members and Superintendents, I wish to quote the text of a lecture given by the late J. B. Johnson, one of the best engineers and engineering teachers this country has ever known, which is as follows: "What costs nuthin is worth nuthin." This will apply doubly to what follows, for I am going to offer some advice, and am thereby going to suggest that when equipping a shop you obtain expert assistance and pay enough for the same to make it worth the man's time to give your case his consideration. First method—Let your shop teacher take over the purely technical things and make him responsible, and if he is suitable for the position as teacher, you will have a shop to be proud of and one where real work can be accomplished.

If you haven't confidence in your teacher's judgment and ability to allow him to select the equipment for his shop, then you should not have him for your teacher, for if he is not competent to select the machinery he is surely not competent to use it or teach its use. If you are afraid of graft, then you should be afraid to have him around your school, as his influence on the pupils will be bad and such influence



# SCHOOL FURNISHING IN ENGLAND

By JOHN Y. DUNLOP, Master of Works, Shettleston School Board, Tollcross, England

## I. ELEMENTARY SCHOOLS.

The knowledge, thought and care required to be exercised in the production of school furniture are much greater than many suppose who look at it in the complete state.

The type and principle have first to be studied for it is a known fact that every large school center in England has its own pattern. Then the proportions and sizes have to be graded to suit all classes of children in the infant, middle and senior schools. And the material to be used in this class of furniture has to be considered.

Until recently a great amount of fittings were made of pitch pine on the score of cheapness, but recently, I am glad to say, that wood has

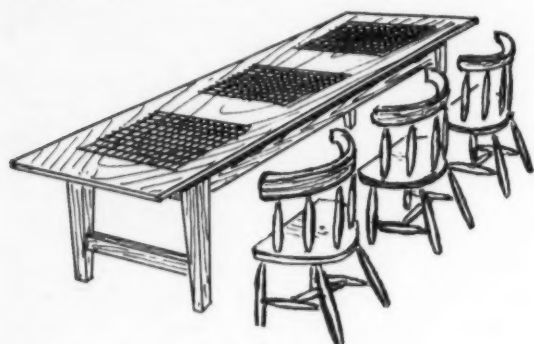


Figure 1.

gone out of fashion for desks, and oak is now almost entirely used.

It will be seen thus that some knowledge of the working of a school is required to be united with the labors and the practical skill of the furniture-maker for the satisfactory completion of an article of school furniture.

All articles depend mainly on their form and construction for their character and not, as in decorative furniture where aid is derived from the art of the carver, on the ornaments.

Kindergarten tables are in the most of cases used for very young children. The tables are made in various sizes—three feet long for two children, and four feet six inches long for three children. (Fig. 1.)

Figure 1 shows a framed table, with stationary legs, the top being marked into squares for the various kindergarten games and exercises. Baby chairs are used with kindergarten tables. These should all have armed support, or vase backs, as shown in Fig. 1.

### Desks and Seats.

*Dual Desks* for infants should be two feet eight inches long; height of seat, ten inches.



Figure 2.

The pattern which is mostly used for young children has the seat and desk in one piece. Figure 2 shows a desk with the front of the writing top and the line of seat exactly over each other, the seat being hinged to tilt up.

The castings for this desk should be in one piece. Some makers for convenience in packing would make the casting in three pieces; namely,



Figure 3.

seat standard, desk standard and floor rail, the pieces being bolted together at the joints. This method does not give the same rigid desk as with a one-piece casting and the method should be avoided. Figure 3 shows a dual desk for a gallery, the seat being clamped on to the standard of the desk behind.

Dual desks are in the most of cases preferred for older children, with folding seats and writing tops. These desks can be made up as shown in Figures 2 and 3, but where the latter pattern is wanted a front desk and a back seat is required to begin and complete a series.

*Blackboards* (Fig. 4) are made of three-ply wood, three thicknesses of wood glued together, the directions of the grains being reversed to prevent warping. The surface is especially prepared with black paint and finally finished with spirit varnish and lamp-black. Composition

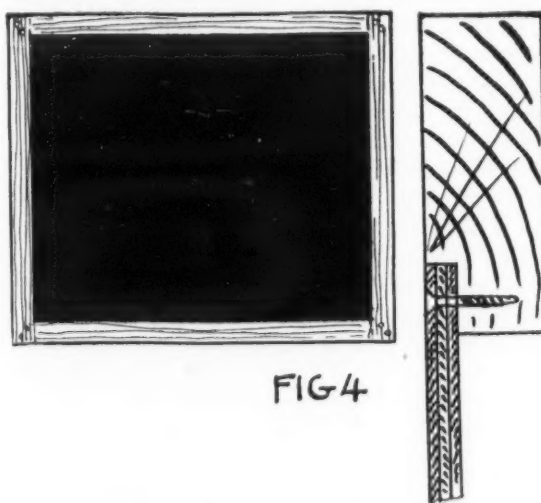


FIG 4

boards are largely used in place of three-ply wood. All portable blackboards are carried in an oak frame and are made movable in an up-right stand on castors.

### Special Furniture.

*Classroom Cupboard.* These presses are about four feet wide by four feet six inches high, with two six-inch drawers, movable shelves and folding doors.

*Cardboards* are made in the form of small blackboards for word-building. These are supported on iron stands so as to be adjustable at any height.

*Ball Frame.* The usual size of this frame is twenty inches by eighteen inches and made with an oak frame, supported on an oak-turned standard.

*Teachers' Desks* (Fig. 5) should be of a commodious pattern, with side-folding shelves and cupboard underneath. The cupboard has two fixed shelves and the desk top and cupboard

door are fitted with a two-lever brass lock fitted with two keys.

*Classroom Cupboards* (Fig. 6) are made four feet wide and four feet six inches high and fifteen inches deep. The presses should be made on the best and most substantial one-piece plan that can be devised. They should be made with two six-inch drawers on the top, three movable shelves and folding door.



Figure 5.

## II. INTERMEDIATE AND SECONDARY SCHOOLS.

Dual desks with single seats and single desks are in general use for schools of this class. Fig. 7 shows the dual desk with fixed writing top and book board on two pedestal stands. The single seat which is shown is fixed. In the most of those schools in which these seats have been fitted the complaint is that the space between the desk and the seat is so cramped that the child has no room to stand to answer a question. To obviate this the seat should be made on the tip-up principle, the seat-bearer being hinged to the cast standard (Figs. 8 and 9).

*Dual Locker Desks* are made in pitch pine and oak. The length of desk is three feet four inches, and should be of three graded heights for junior, medium and senior pupils. The desks should be made with a turn-up locker top for each pupil, having an iron stay; the fixed

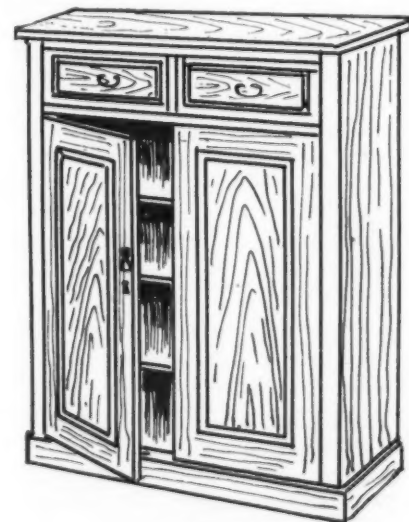


Figure 6.

portion of the top having inkwell, dust-proof cover and receptacle for pens.

*Single Locker Desks* are made with a top hinge. Figure 10 shows a desk wholly composed of wood, the seat and desk halfits being tenoned into the wood bearers. The seat is hinged on a one-half inch iron bar, socketed into the seat



halfits, and is checked in position by wood fillets screwed on to the sides of the halfits.

*Model Stands* are two feet square and two feet, six inches high with twelve-inch adjustable revolving tops.

*Cutting Tables* are made with receptacles, the whole length and width of the table, and fitted with tray for cottons.

*Map Presses* are usually four feet wide, seven inches deep and seven feet six inches high, with

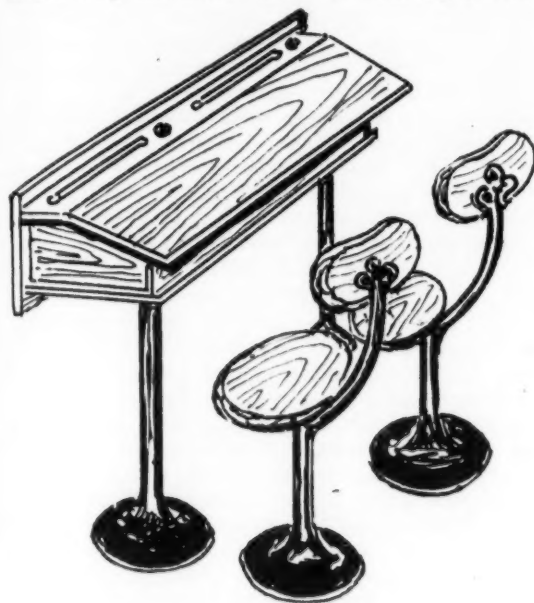


Figure 7.

folding doors and vertical divisions so that as each map is placed on end it can be fixed in the press without depending on its neighbors for support.

*Museum Cases* are made with movable shelves in the top part and one fixed identically in the lower part. The door should be glazed with the best glass, fitted throughout with brass hinges and the best locks.

*Teachers' Desks* should be commodious, fitted inside with pigeonholes. The cupboards underneath are fitted with two shelves and the book shelves at the side are fixed.

*Headmaster Desks.* The inside of the headmasters' desks should be fitted with pigeonholes. The one end of the desks have four drawers, the



Fig. 8.

Fig. 9.

other a cupboard with the door opening at the side.

*Blackboards.* Hanging blackboards are fitted into each classroom, six feet square, suspended on copper ribbons and balanced with lead weights. The ribbons pass over anti-friction pulleys not less than six inches in diameter. The boards are fitted with long, vertical crank handles at each side.

### Laboratory Furniture.

*Chemical Laboratory Tables.* The tables are framed in yellow pine, with a drawer and cupboard for each scholar. They should be fitted with small, white enameled sinks, connected to three-inch cast-iron glass enameled waste-pipes, trapped off at the end of the table.

Bottle-stands, eight inches broad, consisting of three shelves the length of table, are to be fitted on the center.

One gas cock for every two pupils is to be connected to the top of the table, just clear of the bottle-stand.

*Physical Laboratory Tables.* The tables are generally six feet long, four feet broad and two feet ten inches high, fitted with four six-inch drawers and one and one-half inch teak-tops. A four-way gas cock for bunsen burners is connected to the center of the tables.

*Fume Closets* are built against one side of the laboratory rooms so that the outlet from the chamber can be connected to a flue rising to the outside. These should be in yellow pine, with glass on sides, and sloping roof. Access to the closet is obtained by forming a lifting, balanced sash in the front. The working top of the closet, which is supported on brackets, is of one and one-quarter inch slate, and the back should be tiled.

*Cookery Tables* are generally ten feet long and three feet four inches broad, with one inch deal



Figure 10.

tops. The tables should have racks on the ends to hold the baking boards and should be framed with four 6-inch drawers on each side.

*Cookery Cupboards* should be six feet six inches long, eleven inches deep and three feet three inches wide, with folding doors. Two drawers should be fitted in the cupboard, lined with black tin for the keeping of baked goods over night.

*Manual Benches* (Fig. 11). Benches for two pupils should be four feet six inches long. Where the bench is used as a tool stand an opening is cut on each side and a box is formed inside to carry the tool. Where the bench is used for drawing lessons a hinged seat is formed at each end.

*Single Benches* (Fig. 12) are used where it is desired to keep all pupils separate. The benches should be fitted with a quick-action screw grip.

### Technical and Art Department.

*Mechanical Drawing Tables* are usually made ten feet long and three feet broad, with two 5-inch lockers formed under the top. Access to the lockers is obtained by hinging the front of the box. The table is supported on cast-iron standards.

*Lecture Tables.* These should be made nine feet long, two feet six inches broad and three feet high, with drawer and cupboard provision left in the framing for an enameled sink.

*Drawing Board Cupboard.* The size is four feet six inches high, four feet wide and one foot six inches deep. Each compartment is made to hold two half-imperial drawing boards.

*Easels* are usually made double face and with a lifting part six feet high.

*Cast Stands.* These are usually made two feet six inches square and are framed so as to

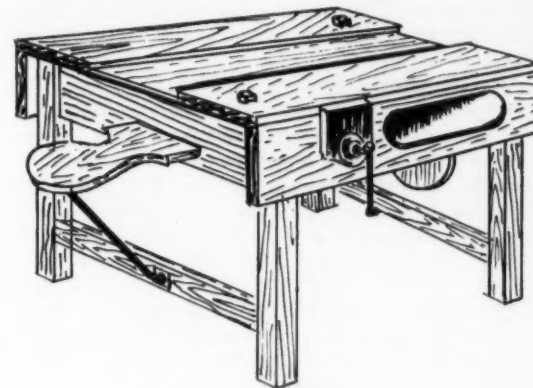


Figure 11.

form cupboards in the inside. The heights vary much, a great deal depending on the nature of the models to be supported and the ideas of the art master in charge.

Note.—A third article, describing furniture for "Cripple Schools" in England, will be printed in an early issue of the "School Board Journal."

### AIM OF TEACHERS' INSTITUTES.

The teachers' institute has much higher purposes than the teaching of a few elementary principles of pedagogy and school management. Its review of some of the common branches of study is only incidental to deeper lying aims. Some of these latter have been formulated by the Education Department of the University of West Virginia in an educational creed reproduced in the University Bulletin. The sections read:

We believe that the county institute should aim to give to teachers a clear and definite idea of what a good school is; that it should show by illustrative or model teaching what good methods of instruction are; that it should furnish a clear and definite view of the present trend, or tendency of education, with special reference to such movements as public health and sanitation, the teaching of agriculture and nature study, manual training and domestic science.

We believe the purpose of the institute to be to develop a professional attitude or spirit on the part of the teacher toward the great work of education; to develop a more conscious idea of the worth and value of the child, and the ne-

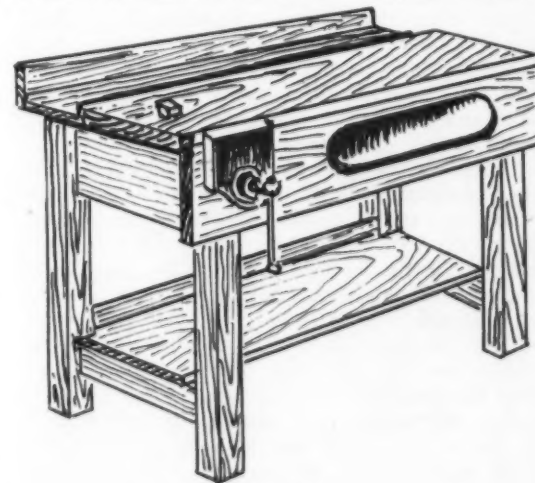


Figure 12.

cessity of the teacher giving the full measure of devotion to her work; to develop an increased sense of responsibility to her profession and to her community, and faithfully to discharge her duties as a teacher; to foster, or create, in the teacher a desire for true scholarship and real culture to the intent that she attain to that breadth and depth of knowledge which will make her instruction a real inspiration to her pupils.

# Purchase of School Supplies in New York City

In any community the purchase and distribution of school supplies is an important factor in the efficient management of the public school system; for the modern school depends, to a much greater degree than ever before, upon good textbooks and hygienic furniture, and a thousand-and-one items used in and about the classrooms. The modern teacher is not a Mark Hopkins and requires more than a log for making a good school.

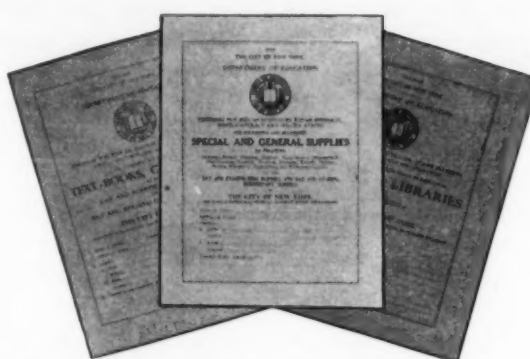
In the rural districts and small cities, the buying and distribution of teaching materials is a comparatively simple matter. The larger, however, the school system and the greater the amount of books and supplies needed, the more involved become the problems of selecting, purchasing, distributing and accounting for the same. In a city like New York the task is a stupendous one, requiring broad experience and large executive ability on the part of the purchasing officers, and the application of economic methods based upon what is correctly termed "scientific management."

School problems in New York City so far outrank those of other cities in the United States that the schoolman who has not visited the metropolis himself can form no adequate conception of their magnitude, the complications which are continually arising or the difficulties which must constantly be surmounted. There are, roughly speaking, 700,000 children enrolled in the elementary schools, and 40,000 children attending the high schools. The total expenditures for all school purposes exceeded in 1910 the enormous sum of \$30,000,000, while the budget for 1913 calls for an appropriation of \$35,000,000. Although the great bulk of expenditures go for teachers' salaries, etc., still under the direction of the bureau of supplies, \$1,165,000 were expended in 1910 for general supplies, books and janitors' supplies, and \$600,000 for fuel. Just what this means can hardly be understood without a visit to the department of supplies, where Mr. Patrick Jones, superintendent of supplies, and his deputy, Mr. John Brasefield, are in charge.

### Methods of Recent Date.

The methods employed in purchasing, storing and distributing educational supplies in New York City date back to the year 1904, shortly after the schools of Greater New York were reorganized as one great system. At that time a central depository was opened in the hall of the board of education on Madison avenue, Manhattan, and was put in charge of Mr. Jones, who had been a district superintendent of schools, and had for many years controlled the buying of supplies for the school board of the old city of New York. The entire plan for handling supplies, as described in this article, was developed by Mr. Jones. The work is directed from the central depository and from sub-depositories in each of the boroughs. Each sub-depository has a corps of clerks and porters and the main office has a force of accountants and stenographers to handle the clerical work.

Under the by-laws of the board of education the superintendent of supplies is the executive officer in respect to the purchase, storing and distribution of all materials for the use of the schools, of the board of education and of its officers and employees. He has charge also of the printing for the board and the transportation of pupils. The rules require him to advertise for bids for supplies and books, to receive and tabulate the bids and to submit them to the committee on supplies for action. He has the duty of "causing the books and supplies to be delivered to the various schools and of keeping an account of the cost and quantity thereof." He is required "to appoint a deputy and such subordinates as may be authorized by the board." He certifies every bill rendered against the board of education for service rendered under his direction. He is required to prepare annual lists of materials needed and to draw up specifications for fuel. The amount of money which he may expend during any school year is determined annually by a committee on



supplies in accordance with the number of pupils enrolled in the schools each year in November. He is obliged annually to make an inventory of books and other materials in the schools. The foregoing are in substance the formal duties of the superintendent of supplies as provided by the rules of the board of education.

### How Supplies Are Bought.

Just what educational supplies are to be used in the schools is determined annually by the board of superintendents. Supplies used by the janitors are recommended by the committee on care of buildings upon the initiative of the superintendent of supplies. Special supplies for high and training schools are recommended by a committee on high schools and training schools; for truant schools, summer schools, playgrounds and recreation centers, by a committee on special schools; for lecture centers and school libraries, by a committee on lectures and libraries.

When lists of supplies recommended are received by the bureau of supplies, advertisements are inserted in the official newspaper of the city for a period of ten days. "Bid Books" are made up, containing lists of the articles wanted, the conditions for bidding, the forms of contracts, the bonds to be executed, etc. The bonds required usually amount to fifty per cent of the

value of each tender. A certified check, or cash deposit, amounting to two and one-half per cent of the bid is also required. The deposit is returned when a contract has been executed or is held as security when the amount of the contract is less than \$1,000.

The largest list prepared by the department of supplies is the so-called "General Bid Book," which is a request for bids on all general and special school supplies, including domestic science, drawing, janitors, kindergarten, mimeograph, physical training, and miscellaneous supplies, manual training, science, sewing, typewriting and workshop supplies, school records and stationery for the day and evening high schools and the day and evening elementary schools. The list for 1912 makes a book containing 113 pages and includes 1,555 separate items, ranging from wheelbarrows and wrenches to atomizers and wood alcohol.

### Handling Bids.

In addition to the advertisements in the "City Record" as many as a thousand invitations are sent out to manufacturers and dealers in the various items called for. As many as 175 firms enter the competition and the aggregate number of bids sometimes represents 7,000 tenders, or from one to twenty actual offers on each item. All prospective contractors are asked to call and examine the standard samples which must be equalled. Each is furnished with a portion of the sample on file so that he may have every facility for figuring intelligently. Of course, such articles as chisels, hammers, etc., are not given out, but an opportunity is afforded to examine them thoroughly. With each bid presented to the bureau there must be a sample of the article which the contractor proposes to furnish. The idea is to compare the sample submitted with the standard article so that it may be determined in advance whether the contractor contemplates giving material equal to the standard. This has been found necessary be-

**PUT THIS RUBBER ON CELL**

**ORIGINAL ORDER**

**SUPPLIES FUND**

**1911 No 13200 S Department of Education**

BOROUGH OF \_\_\_\_\_

NOTICE  
Each package must have marked on the outside, the order numbers, and the description of the goods contained therein. Quantity must be omitted in every instance.

(continued)

Please deliver the following to:

LIN Number	QUANTITY	DESCRIPTION	PRICE

Depositories [500 Park Avenue  
4th East 60th Street  
Dor. Manhattan] 10th Street and First Avenue

Supplies must be delivered between 9 a. m. and 5 p. m. Saturdays 9 a. m. to 12 m.  
Bills must be rendered in quadruplicate upon the official form of the Board of Education, to be had upon application to the Auditor, Board of Education, 500 Park Avenue.  
The original, duplicate and triplicate Bill, with order attached, to be transmitted to the Auditor. Quadruplicate copy of bill to accompany delivery.  
Order must be filled within \_\_\_\_\_ days after receipt of same unless otherwise directed.

Superintendent of School Supplies

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When requests are received by the bureau, they are recorded in the school-account ledgers and are tabulated so that the superintendent of supplies may know exactly what materials have been ordered by the principals. This enables the quantity of materials on hand to be checked and ordered and such articles as may be needed







# VACUUM CLEANING OF SCHOOLHOUSES

## AN INQUIRY INTO ITS STATUS

Of the newer applications of science to industry few have proven so valuable hygienically and economically as vacuum cleaning. Based upon a simple principle in physics, and developed through the ingenuity of the mechanical engineer to a high state of efficiency, suction cleaning has in a comparatively few years established itself in public favor as one of the potent health agencies of the present time.

Beginning at first, with an apparatus which blew the dust out of rugs and carpets through air pressure created in a rubber tube, mechanical cleaning has undergone a number of significant changes. The clouds of dust produced by the first blowing outfits led an observing manufacturer to add a second tube close to the blowing nozzle, through which with a crude fan he sucked away part of the arising dust. The success of his apparatus, with its cumbersome double hoses and unwieldy tools, led gradually to the abandonment of the blower and a corresponding development of the suction principle.

Since the completion of the first crude vacuum cleaning apparatus about fifteen years ago, the hygienic value of the same has been finding increased recognition from year to year, and hygienists are a unit on its desirability and practicability. The effort of manufacturers has, in the meantime, been mainly in the direction of refining machinery and of increasing the efficiency and economical operation of tools and vacuum producing methods. Today a number of machines are offered to the public which can demonstrate a high degree of efficiency and dependability and a comparatively low cost of installation, with a very low expense of operation.

The earliest use of suction cleaning devices was quite naturally in homes, hotels and apartment buildings, where rugs, carpets and upholstered furniture required cleaning at frequent intervals. To these the mechanical principles adapted themselves naturally and easily, the fabrics themselves acting as a help to the cleaning tools. For nearly ten years practically no vacuum cleaners attempted to remove dust from such surfaces as bare floors, walls or wooden furniture.

In such buildings as homes, dormitories, hotels and apartments vacuum cleaning has demonstrated its value in removing dust and dirt not only hygienically, but also economically. In fact, vacuum cleaning is today one of the great economies practiced by hotel-keepers. Carefully arranged tests, extending over periods of a year or more, have demonstrated the fact that vacuum cleaners not only do work more quickly and effectively than brooms and brushes, but also save carpets and fabrics from wear and tear to an appreciable degree.

About ten years ago the first tools adapted to cleaning floors were developed by an enterprising manufacturer. So far as can be ascertained, the first vacuum cleaning plants to be installed in public schools were put in operation less than five years ago. One of the very first was installed in the old Sixteenth District School in Milwaukee, and immediately proved its value as a hygienic means of cleaning. The transformation of this building from a smelly, insanitary school to a dustless, clean building led to a number of tests which were the beginning of vacuum cleaning as a feature of school sanitation in the West. The success in the Milwaukee school led to the wider interest in the subject, and gradually a large number of schools have introduced the process, until today no state in the Union, and hardly an important city but has made a start for equipping at least its newest schools with vacuum apparatus.

In an effort to secure independent opinions of school officials on vacuum cleaning, seventy-five letters were sent out from the office of the School Board Journal several months ago, to the leading cities of the United States. The letter read:

### An Inquiry.

The subject of vacuum cleaning as applied to schoolrooms is being discussed in several cities, and we should be pleased to get your opinion on the same. It is argued that dust removal by the vacuum process is no more costly than by the old brush and broom method and that it greatly improves the sanitary condition of school buildings.

1. Do you believe that vacuum cleaning is a factor in promoting the health of pupils?
2. Do you believe that considering improved sanitary conditions and the reduction in janitors' labor, vacuum cleaning is fully worth the money spent in installing and maintaining stationary plants?
3. Are any of your buildings equipped? If so, how many?
4. Would you recommend vacuum cleaning for future buildings (or for present old buildings) in your city?

We should be pleased to receive your judgment on these questions. Please place your answers following the questions and write any comment you may desire to make on the other side of this sheet.

The questions sought to bring out salient points of interest, in connection with the vacuum cleaning process, such as the writer had been asked by school officials themselves. Although hygienists have generally favored suction cleaning, it was desired to learn what practical men in charge of school buildings thought of the process. If possible, also, with the brief experience which schoolmen have had, it was sought to learn what they thought of vacuum cleaning from the standpoint of economy. A tabulation of the replies received is as follows:

CITY.	Favor V. C. for Sanitary Features.	Desirability.	No. of Schools Equipped.	Recommends Introduction of V. C.
Albert Lea, Minn. ....	Yes	Yes	0	Yes
Ann Arbor, Mich. ....	Yes	Doubtful	0	Doubtful
Aurora, Ill. ....	Yes	Yes	0	Yes
Baltimore, Md. ....	Yes	Yes	5	Yes
Bangor, Me. ....	Yes	No	0	Yes
Berkeley, Cal. ....	Yes	Yes	0	Yes
Blackfoot, Ida. ....	Yes	Yes	0	Yes
Boston, Mass. ....	Yes	Yes	4	No
Boulder, Colo. ....	No	Yes	0	Yes
Buffalo, N. Y. ....	Yes	Yes	0	
Burlington, Ia. ....	Doubtful			
Chanute, Kan. ....	Yes	Doubtful	0	Doubtful
Chicago, Ill. ....	Doubtful		1	
Council Bluffs, Ia. ....	Yes	Yes	0	Yes
Dallas, Tex. ....	Yes	No	0	No
Decatur, Ill. ....	Yes		1	
Des Moines, Ia. ....	Yes	Yes	1	Yes
Detroit, Mich. ....		Yes	2	Yes
Edwardsville, Ill. ....	Doubtful		0	
Freeport, Ill. ....	Yes	Yes	0	Yes
Grand Rapids, Mich. ....	Yes	Yes	1	Yes
Greeley, Colo. ....	Yes	Yes	0	Yes
Hartford, Conn. ....	Yes	Yes	3	Yes
Hutchinson, Kan. ....	Yes	No	1	No
Indianapolis, Ind. ....	Yes	Yes	0	Yes
Joplin, Mo. ....	Yes	Yes	0	Yes
Kansas City, Mo. ....	Yes	Yes	1	Yes
Louisville, Ky. ....	Yes	Yes	2	Yes
Lowell, Mass. ....	Doubtful		0	
Milwaukee, Wis. ....	Yes	Yes	7	Yes
Minneapolis, Minn. ....	Doubtful		0	
Nashville, Tenn. ....	Yes	Yes	1	Yes
Newark, N. J. ....	Yes	Yes	10	Yes
New Milford, Conn. ....	Yes	Yes	0	Yes
New York, N. Y. ....	Yes	Doubtful	0	Yes
Norwich, Conn. ....	Yes		0	No
Parsons, Kan. ....	Yes	Yes	0	Yes
Passaic, N. J. ....	Yes	Yes	2	Yes
Philadelphia, Pa. ....	Doubtful		0	
Portland, Ore. ....	Yes	Yes	14	Yes
Providence, R. I. ....	No	No	0	No
Richmond, Va. ....	Doubtful		0	
Rochester, N. Y. ....	Yes	No	0	Yes
St. Joseph, Mo. ....	Yes	Yes	0	Yes
St. Louis, Mo. ....	Yes	Yes	5	Yes
St. Paul, Minn. ....	Yes	Yes	0	Yes
San Antonio, Tex. ....	Yes	Doubtful	0	Yes
San Bernardino, Cal. ....	Yes	Yes	0	Yes
Scranton, Pa. ....	Yes	Doubtful	1	Doubtful
Seattle, Wash. ....	Yes	Yes	1	
Springfield, Mass. ....	Yes	Yes	2	Yes
Springfield, Mo. ....	Yes	Yes	0	Doubtful
South Omaha, Neb. ....	Yes	Doubtful	0	Yes
Terre Haute, Ind. ....	Yes	Yes	1	No
Wheeling, W. Va. ....	Doubtful		0	
Winona, Minn. ....	Yes	Yes	0	Yes
Worcester, Mass. ....	Doubtful		0	
Youngstown, Ohio ....	Yes	Yes	4	Yes

The replies received indicate that of the fifty-eight cities only two declared vacuum cleaning not to be a factor in hygiene. Strange to say, neither of these cities has a vacuum plant in operation and the belief expressed is based not upon experience or direct observation, but on opinion only. Nine schoolmen are doubtful, while forty-seven express the belief that it is a distinct help to school hygiene.

The bare figures, however, convey little of the emphatic sentiment expressed for vacuum cleaning. Thus Mr. Benjamin B. Owens, who has had charge of the construction and superintendence of the school buildings of Baltimore, writes:

"There is nothing coming within my experience that will help conserve the health of school children so much as the thorough elimination of dust from the air of classrooms. No floor oil, sweeping compound or other method of dust removal equals that of the vacuum cleaning method."

E. P. Pratt, of Berkeley, Cal., expresses himself thus: "Vacuum cleaning is certainly a factor in promoting the health of the child. The brush and broom method, also the old duster just transfer the dust from one place to another, and if you go back into the room in ten minutes you will see where the dust has settled. How different with the vacuum system. After you go over the room and go back in ten minutes there is no sign of the dust. Yes, dust and dirt are our greatest enemies in the schoolroom."

Mr. S. M. Dyer, of Joplin, Mo., concurs in this opinion and adds: "I am of the belief, from my observation and knowledge of vacuum cleaners, that they would be more sanitary and conducive to the health of children and janitors if used altogether. A person cannot sweep with a broom (even if he uses sweeping powder) without raising more or less dust. Another thing, a broom can't take dust out of cracks and the result is that every crack in the floor is filled with dust to be stirred up all the next day, where, if a vacuum cleaner of the right design were used, it would suck all dust out of cracks as well as anywhere else."

Several superintendents of buildings and school secretaries speak of vacuum cleaning as "an indispensable factor for sanitation, "very valuable," "highly desirable."

### The Labor Saving Factor.

Wide variations of opinion exist, among schoolmen, as to the actual time and labor saving qualities of vacuum cleaning machinery. Most of them frankly state that they do not expect any great saving economically. As one puts it, "the electric light is more expensive than the old tallow candle, yet who in this day would be willing to go back to the candle?"

Baltimore, Des Moines, Detroit, Hartford, Kansas City, Mo., Nashville, Passaic and Portland, Ore., report that there is a distinct saving both in time and labor by the introduction of vacuum cleaning apparatus. Other cities, among them Decatur, Hutchinson, Milwaukee, Newark, Rochester, Boston, St. Louis, and others, declare that there is very little economy, if any, in either the time or the cost of vacuum cleaning, but that the systems have more than proven valuable by the greater cleanliness produced in classrooms and corridors.

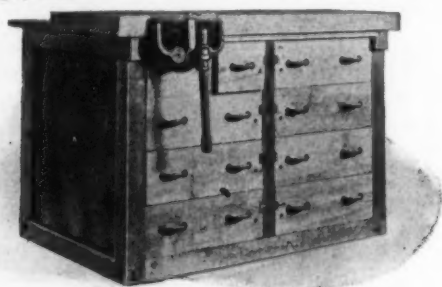
Thus Mr. Mark B. Mulvey writes: "The installation of a vacuum cleaner does not reduce the janitor's labor, as it takes considerably longer to clean a room properly with a vacuum system. I believe, however, that if single standard desks are installed the work will be done better

(Concluded on Page 51)



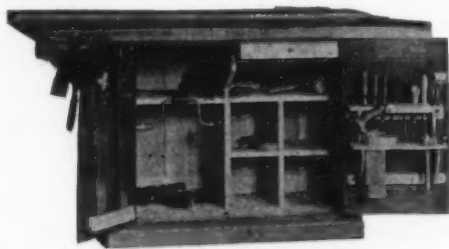
# THE SCHOOL HOUSE AND ITS EQUIPMENT

The Orlock No. 155 Bench has as its feature a patent locking system which is really unique. By this device all partitions are eliminated and all space is used for depth. There is a stop on every drawer so that the pupil cannot tamper with any but his own tools. The teacher can, by removing the strip, open any drawer, and, if necessary, remove it from the bench. If for any reason the teacher desires to lock the whole system to the exclusion of all individual keys, he can do so by reversing the strip. The drawers are made large to accommodate all tools and materials needed by the student. Manufactured by Orr & Lockett Hardware Co., Chicago, Ill.



THE ORLOCK NO. 155 BENCH.

The "Peerless" No. 15 Bench eliminates entirely the drawer idea. With the exception of one small inside drawer access to the cabinet is entirely by doors. The doors are fitted with tool racks so that the pupil by merely opening the doors has everything at his command. The bench is made of selected oak. The top is built up of 1 3/4 inch maple strips glued and doweled together. The interior arrangement of the bench is entirely in the interest of the pupil and the accommodation of his tools. Manufactured by B. K. Elliott Co., Pittsburgh, Pa.



THE "PEERLESS" NO. 15 BENCH.

Bemis Standard Bench No. 6 is standard in size, height and top. It has been on the market for a great many years and has met approval in all parts of the country. It is made of maple, with the top glued up in strips. Screws and vises furnished as ordered. Manufactured by A. L. Bemis, Worcester, Mass.

The Grand Rapids Hand Screw No. 42 Bench is made exclusively of Michigan hard maple. The top is featured in the fact that it is double tongued and grooved. The frame work is fully mortised and joints are tenoned. The cabinet comprises three drawers and a cupboard. Each drawer is 18 inches long, 18 inches wide and 3 3/4 inches deep. The cupboard is 18 1/2 inches long, 14 1/4 inches high and 10 inches wide.

## MANUAL TRAINING BENCHES



THE GRAND RAPIDS HAND SCREW NO. 42 BENCH

Vises both open 8 inches and are fitted with 1 1/2 inch saw-cut threaded screws. Manufactured by the Grand Rapids Hand Screw Co., Grand Rapids, Mich.

The Christiansen Bench No. 15 is made of hard white maple. Its dimensions are 42 inches, length, 22 inches, depth, 32 inches,



THE CHRISTIANSEN NO. 15 BENCH.

height. The top is 2 1/4 inches thick. The drawer measures 22 inches in depth, 19 inches in width, 6 inches in height. The bench is fitted either with Abernathy roller-nut, rapid-acting vise No. 70 D, steel dog and bench stop, or with Christiansen's steel-screw vise. Manufactured by C. Christiansen, Chicago, Ill.



THE RICHARDS-WILCOX BENCH.

The Richards-Wilcox Bench has been designed with the greatest care. It is 32 inches high while the length of the top is 48 inches,

width 21 inches and width of back shelf 7 inches. The bench has three drawers and a cabinet. These are planned for the ordinary tools used by pupils. Hard maple is the wood used in the construction. Manufactured by Richards-Wilcox Mfg. Co., Aurora, Ill.

The Economy Bench is a combination tool cabinet and bench. It has seven drawers. The larger drawer is 31 3/4 x 22 x 6 3/4 inches inside. The six small drawers are 15 3/8 x 22 x 5 inches inside. The bench itself is made of oak or ash for the frame and hard maple strips, glued up, for the top. The latter is 24 x 54 x 2 1/2 inches.



THE ECONOMY BENCH.

The bench is fitted with bench stop and tail vise. Manufactured by the Economy Drawing Table Co., Toledo, Ohio.

The Sheldon Bench has as a feature of construction a new process of jointing by which it is claimed that frames more than double in strength. The girts are full 5 inches wide, unusually heavy and bolted to the stands with 6 inch machine bolts. The bench itself (Alaska Model) follows standard dimensions of 32 inches high, top 52 inches long, 22 inches wide, 2 1/4 inches thick. The drawer is 6 inches high, 32 inches long, 19 inches wide. Manufactured by E. H. Sheldon & Co., Muskegon, Mich.



THE SHELDON BENCH.

The Columbia All-Steel Frame Bench is distinguished from the accepted types of manual training benches for two ideas. In the first place it is mounted on an all-steel frame. This frame is made of 1 1/2 inch angle steel. The lower and upper sections are each bent at right angles by a patented process in one piece. The two telescope, thus producing the adjustable feature. This is quite distinctive and does not weaken the rigidity of the bench. Manufactured by the Columbia School Supply Co., Indianapolis, Ind.

(Concluded on Page 57)





NEW HIGH SCHOOL, ENID, OKLA.  
R. W. Shaw, Architect, Enid, Okla.

### ENID HIGH SCHOOL.

An eminent foreign architect, who recently visited the United States, has remarked that American architects display a keen effort to give character to college and municipal or state institutional buildings and succeed in producing attractive as well as appropriate designs. Even the harshest critic of architecture must concede that American schools have made wonderful advances not only in simplicity and dignity of design, but also in convenience of arrangement, adaptability to the needs of the schools, and attention to sanitary details. A building which well reflects this wonderful improvement is the new high school at Enid, Okla., completed recently from designs of Mr. R. W. Shaw.

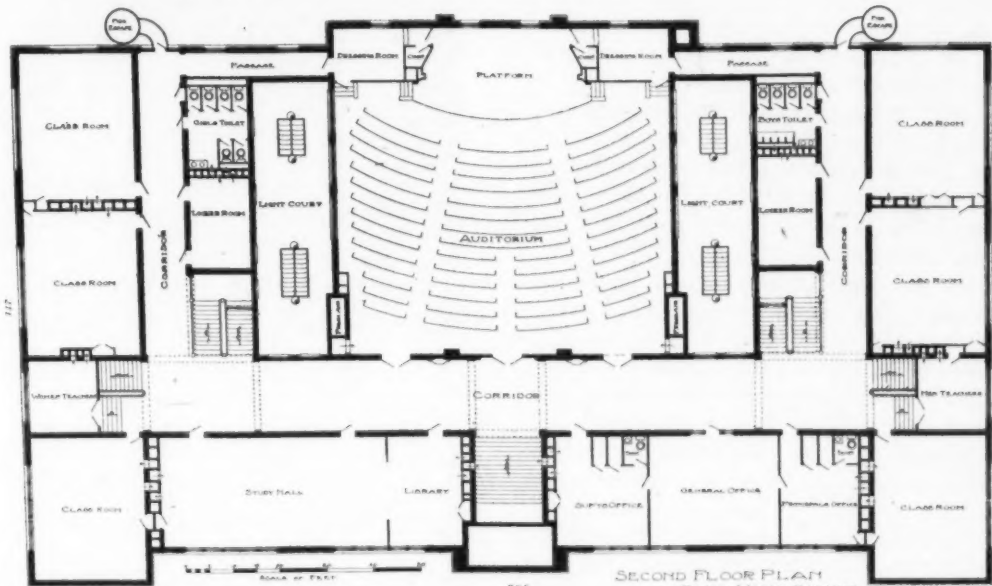
The design of the building is distinctly modern, rather plain, but altogether a well studied adaptation of the late Gothic. While this splendid style predominates, the architect has made use of some Chaldean and Periclean Greek motives to typify the cosmopolitan character of the courses of study to be offered in the school. The building occupies an entire block of ground and covers an area of 105 feet by 117 feet, with a boiler and fuel room in the rear, measuring 40 feet by 57 feet.

Dark-red, face paving brick, with round edges, laid in black mortar, with deep-sunk joints, has been used in the general construction. The trimmings consist of Carthage stone, with terra cotta to match. The roof is gravel, covered with Barrett's specification, five-ply material, and all exposed metal work is copper.

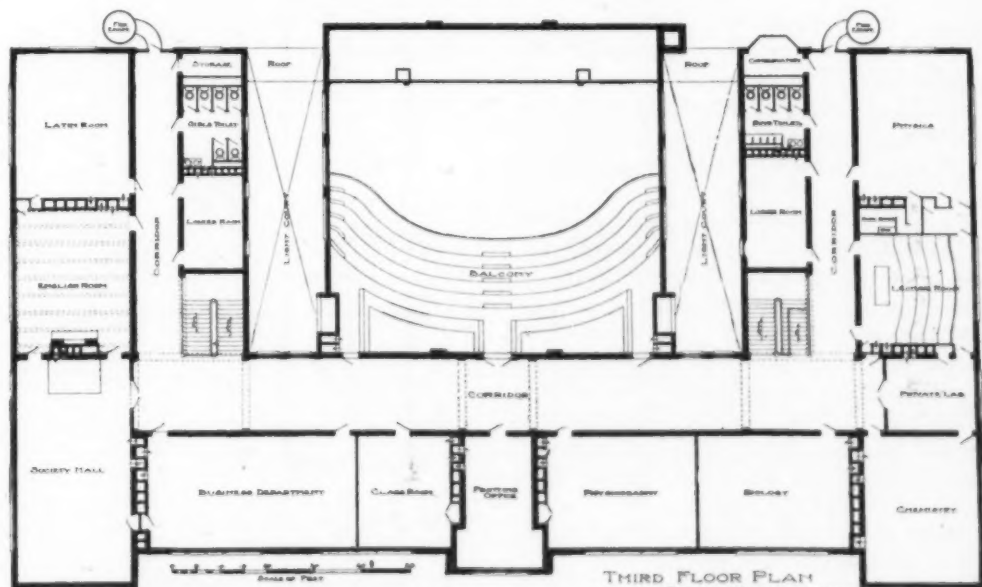
The building stands completely isolated, and while not strictly fireproof, is nearly so in fact. The roof frames and a portion of the floor joists are of wood. Where the latter occur, the floors are doubled with double-ply Cabot asbestos quilt between, and metal lath and plaster below. Where wood joists are used the rooms are enclosed entirely within masonry walls. The corridors, halls and stairways are strictly fireproof.

The building is three stories high and is so arranged that the ground floor is only a foot above the surrounding site. There are three main entrances and two emergency exits. The front entrance gives direct access to the second floor, and the side and rear entrances admit to the ground floor and also to the second floor. The corridors form the shape of the letter "U" and lead directly to the stairways and the assembly hall.

The ground floor is devoted almost wholly to



SECOND FLOOR PLAN, ENID HIGH SCHOOL.



THIRD FLOOR PLAN, ENID HIGH SCHOOL.

the manual training, domestic science and physical training departments. To the right of the main entrance is a long shop for bench and lathe work, equipped with turning lathes, saws, etc., for woodworking. Beyond it is a storeroom and in the corner a large room for mechanical drawing. To the rear is a forge room,

equipped with anvils and blowers for metal work. A moulding room is also provided. In the woodworking shop a number of lathes are arranged for working iron.

The space to the left of the main entrance is occupied by a lunch room with which is connected a kitchen and storeroom, equipped for the

preparation of light lunches. In the left wing of the building are placed rooms for teaching cooking, sewing and the care of homes.

In the center of the building, between the domestic science and manual training departments, is the gymnasium. This room is six feet below the surrounding grade and has a ceiling twenty feet high in the clear. It has adjoining it large locker rooms and separate shower baths for boys and girls. The arrangement is such that the room has separate entrances and exits and may be used independently of the remainder of the building.

The heating and ventilating apparatus is in the center of the building, between the gymnasium and the main corridor. Steam for it is supplied by two boilers, set in a separate building to the rear. The latter is below grade and has a large fuel pocket into which coal may be dumped through man-holes in the roof. The steam-blast heating plant has a capacity of 35,000 cubic feet of fresh air per minute, sufficient to change the entire atmosphere in the building every ten minutes. Two large blowers are installed and the air is passed over humidifiers before entering the heat-ducts. A special feature of the plant is the distribution ducts which are made of reinforced concrete and are placed beneath the ground-floor corridors. The kitchen and laundry rooms and the domestic science rooms, all of the toilets, the forge rooms and the chemical laboratory are equipped with separate ventilating systems, independent of each other and separated from the general system. Direct heat is placed in such rooms as may be used outside of regular school hours. The entire heating system is automatically controlled with Johnson thermostats.

The second floor is given up to study and classrooms. There are six standard classrooms, a large study hall, connected with a library, an office for the superintendent of schools, a general office for the board of education, and an office for the principal of the building.

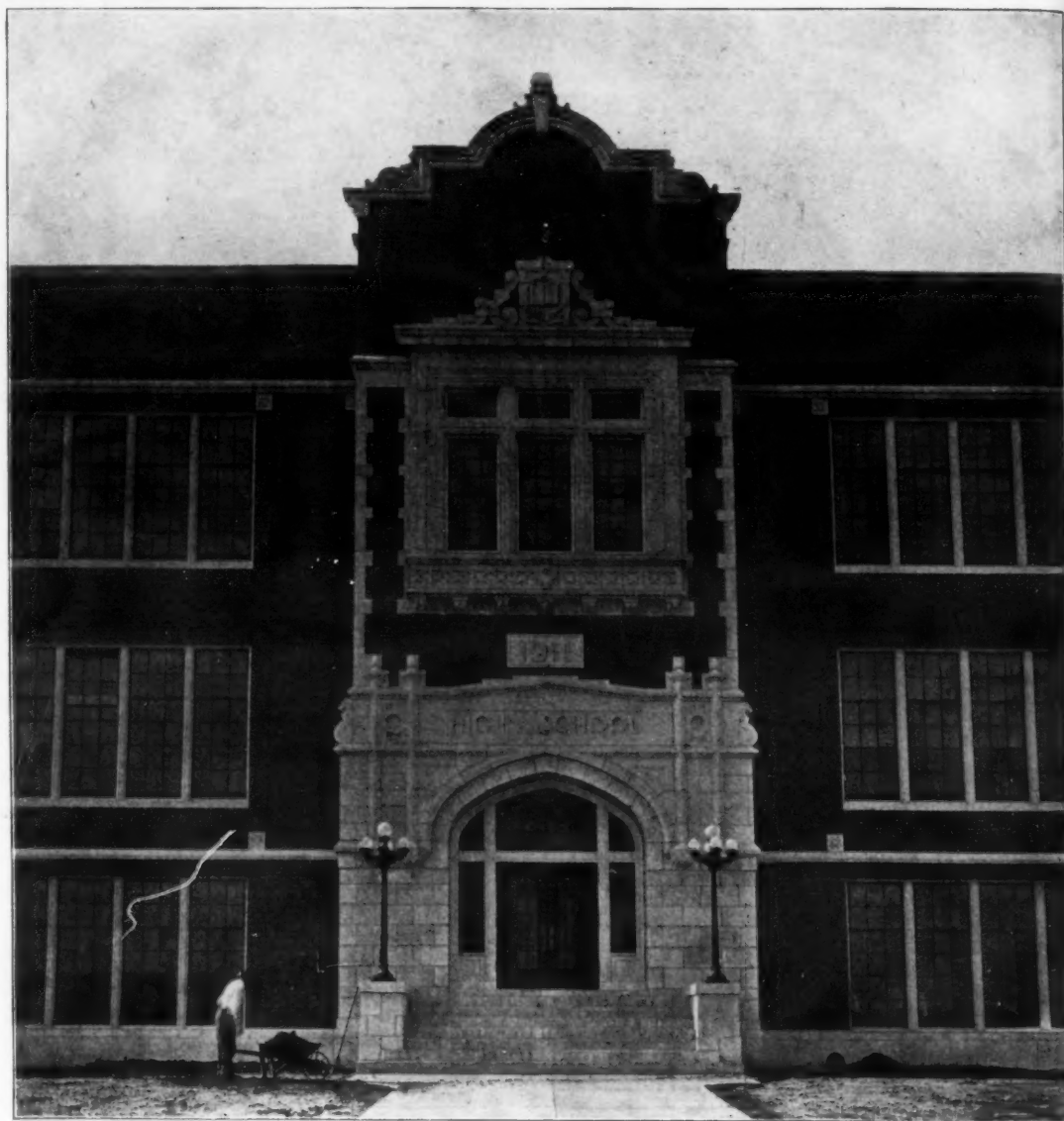
The largest room on the second floor is the auditorium which occupies the central space between the two wings. The room will seat 900 persons on the main floor and balcony and has a stage thirty-three by nineteen feet in size, with dressing rooms adjoining. The balcony is entered from the corridor on the third floor.

The laboratories are grouped together on the third floor. An amphitheater lecture room is provided for demonstrations and a workroom and dark-room and space for storage have not been overlooked. Special furniture, including cabinets for storage, demonstration tables, an aquarium, etc., has been installed in the laboratories.

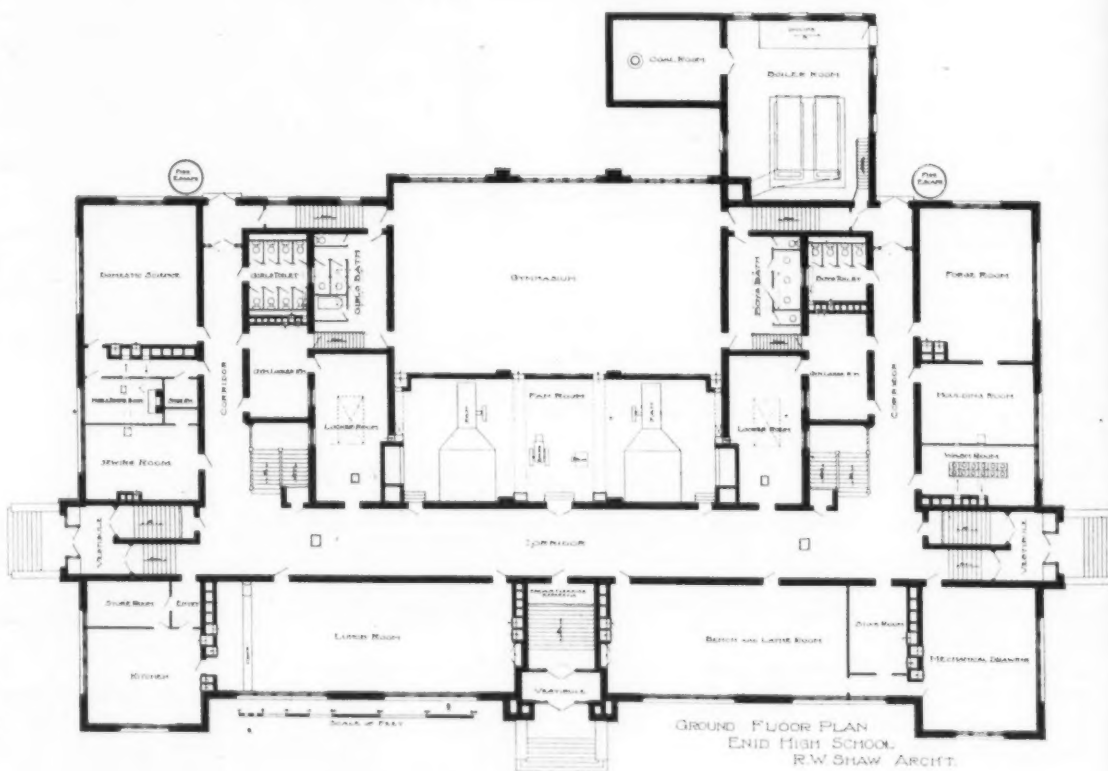
The Latin and English rooms are worthy of note. The former has woodwork and wall decorations in classic design and the latter has a beamed ceiling and a fireplace following an early English domestic style. The idea of relating the studies in a room to the surroundings suggests possibilities which architects have hitherto not recognized. A large business department, a small print shop for the students' magazine, a classroom and a society room complete the third floor.

A portion of the right wing is carried up to give space for a skylighted art room.

In the arrangement of the building the architect has given especial attention not only to the larger problems of design upon which the modern school depends so much for success but also to the smallest details of finish and equipment. A glance at the plans will disclose how well the corridors, stairs, exits and fire escapes have been disposed to shorten travel distance in changing classes, to facilitate disciplinary control, to safeguard against possible congestion



ENTRANCE, ENID HIGH SCHOOL.



GROUND FLOOR PLAN, ENID HIGH SCHOOL.

and danger from panics. The same careful thought has been shown in the placing of toilets, locker rooms, teachers' rooms and administrative offices.

The floors in the building have been subject to special attention and study. In the classrooms hard maple has been used and in the manual training rooms cement, finished with a special dust-preventing preparation. The kitchen and domestic science rooms have a sanitary

composition flooring and the gymnasium has "Corkolin"; the baths and toilets have tile and the corridors have oak blocks, laid in herringbone pattern, in a special mastic preparation. The last mentioned floor is durable, solid and practically noiseless.

All walls in the building have a sand finish and are painted in flat colors. The corridors have been wainscoted with brown glazed brick and the gymnasium and manual training rooms

have been employed entrance with mal

The pneumatic vacuum

The building, ing, vent the equi

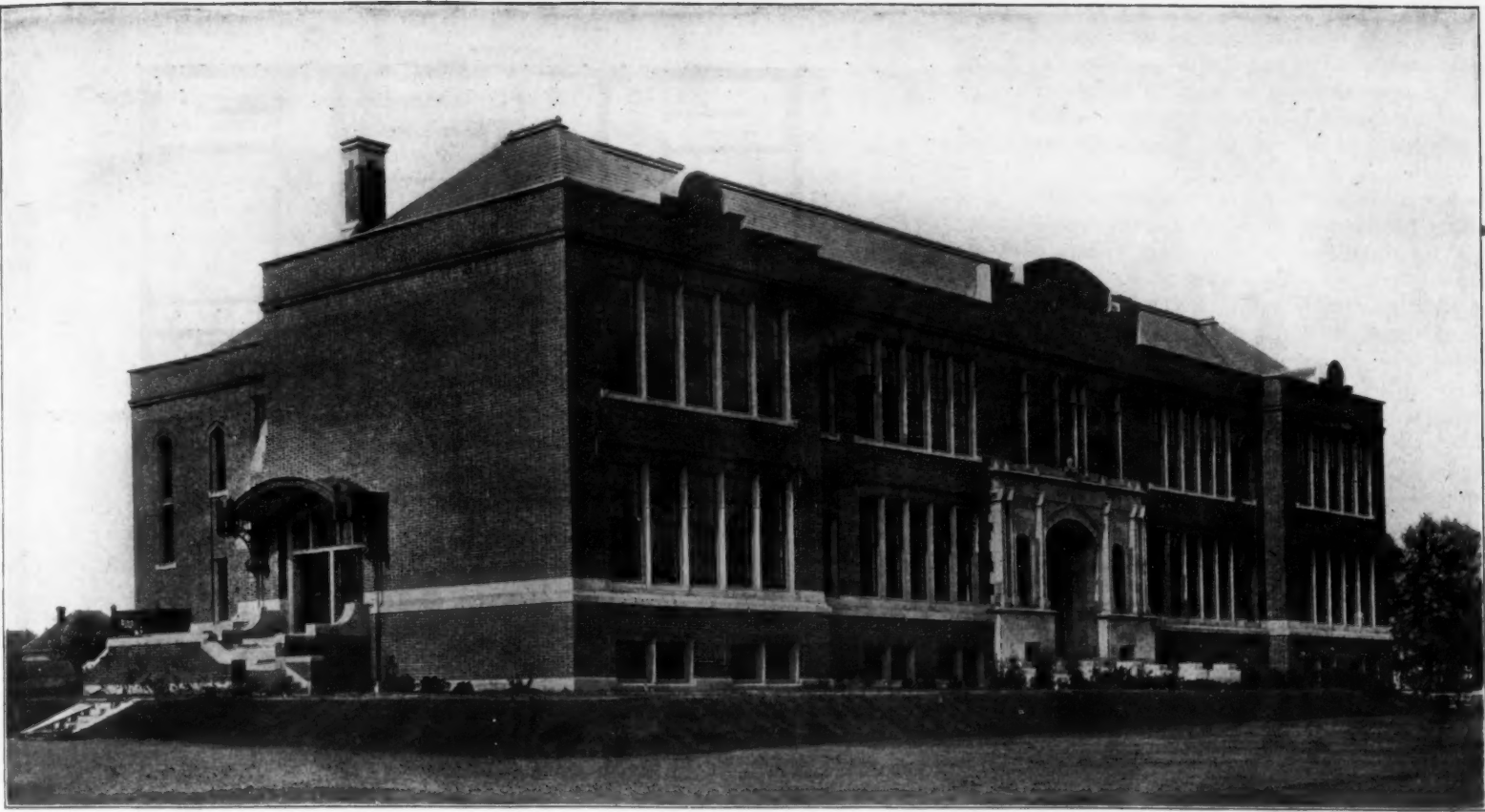
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NEW SWIFT SCHOOL, AUBURN, N. Y.  
S. E. Hillyer, Architect, Auburn, N. Y.

have been similarly treated. Marble has been employed for the stairs and walls of the main entrance. In general, the wood trim is birch, with mahogany finish.

The administrative equipment includes a pneumatic clock and program bell system. A vacuum cleaner is installed in the basement.

The general contract for the construction of the building amounted to \$125,000; for the heating, ventilation and plumbing to \$22,000, and for the equipment \$25,000.

#### A MODEL GRADE SCHOOL.

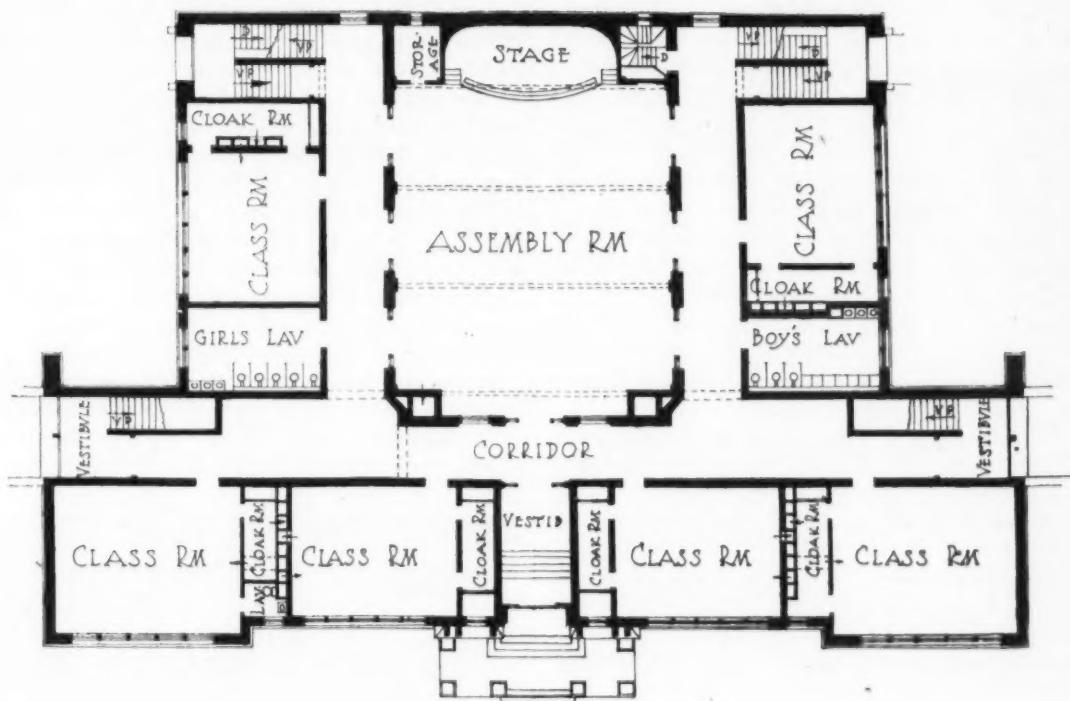
The new Swift Street School, in Auburn, N. Y., is an embodiment of the latest developments of building planning and construction, as applied to elementary schools. Sanitation, safety, completeness and durability have been the watchwords to guide the architect.

The exterior has been finished in sand-mold red brick and Indiana limestone. The roof is slate. The design is a pleasing adaptation of the Collegiate Gothic, very simple and plain, depending for its good effect upon good proportions and outlines rather than elaborate ornament.

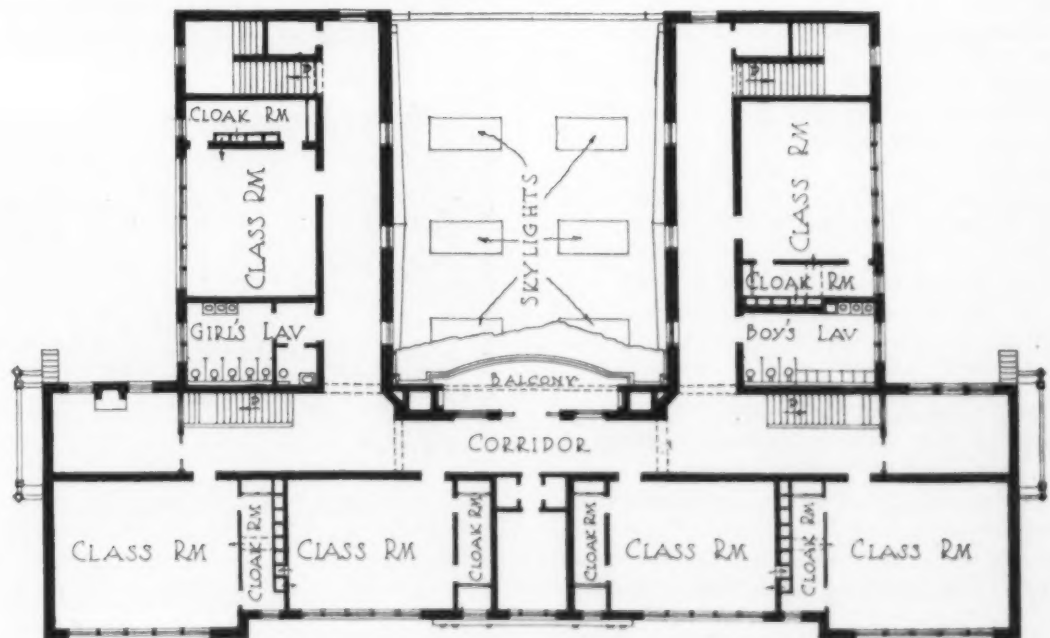
Although the building is not absolutely fire-proof it is highly fire-resisting. The walls and ceilings of the boiler and fuel rooms, the stairways and the floors of the toilet rooms are wholly incombustible so that every vital point where fire danger might be found is adequately protected. The outer walls and the partitions carrying the staircases are brick, backed with terracotta building block. The same material has been employed in all the interior partitions. The floors and roof are supported by wooden timbers so constructed that all air spaces are stopped with masonry. The ceilings throughout are of plaster over metal lath.

The plan of the building is simple and regular and has been developed with two purposes in mind, safety and ready administration. The five entrances and four stairways have been separated as far as possible, but have been placed so as to give direct access to any room and to reduce the travel distance in the change or dismissal of classes.

The basement contains two rooms 27 by 37 feet in size, and four rooms 20½ by 25½ feet, plastered and finished like classrooms. While they are at present used for play, it is expected



FIRST FLOOR PLAN, SWIFT SCHOOL.



SECOND FLOOR PLAN, SWIFT SCHOOL.

that they will be fitted for manual training and domestic science. The two rear rooms have full length windows and can be used, if necessary, for regular classes. The entire basement is well damp-proofed and is ventilated just like the classrooms above.

The first floor has two large classrooms seating forty-two pupils each, and four rooms planned for thirty-five children each. The second floor offers the same accommodations and has in addition two recitation rooms for special classes of sixteen children. Each of the standard classrooms is arranged for unilateral lighting and has adjoining it a cloakroom of the Boston type.

The assembly on the first floor has a total seating capacity for 350 persons and is arranged for rapid dismissal. The stage is large enough for all ordinary school exercises and entertainments. Since the completion of the building the room has been frequently used for neighborhood gatherings, lectures and social affairs. It is fitted with removable folding chairs so that it can readily be put to different uses. The small balcony has been especially useful for placing the stereopticon during illustrated lectures.

The interior finish has been designed not only for hard wear but also for sanitary upkeep. All walls are plastered; the wood trim is stained chestnut, flat finish; the floors are maple. The stairs have slate treads and risers on iron supports, which are built into the walls. The classrooms are each fitted with natural slate blackboards, single desks, a teachers' desk and a permanent cupboard for teaching materials and books.

The exit doors of the building are fitted with self-opening panic-bolts and locks which cannot be locked on the inside.

The sanitary equipment is of a special school pattern. The lavatories are arranged in stacks and have tile floors and wainscoting, slate urinals and closet partitions. The closet fixtures are of the high tank type, individually vented. Hot water is provided in the basement baths and in each toilet room for cleaning.

The heating and ventilating system is of the plenum type. Steam for heating the fresh air is furnished by two low-pressure boilers. The fresh air is taken in at the second-story level and is forced into the rooms by a double, motor-driven Sirocco fan. When the school is not in session it is arranged that the fan may be stopped and, by means of a by-pass in the attic, the air may be re-circulated through the heating coils. The corridors and lavatories have direct radiation. The latter are provided with separate flues, which are exhausted by means of an electric fan. The assembly hall and each of the classrooms have independent temperature control. The heating system was designed by Mr. Samuel R. Lewis, of Chicago, and cost \$8,233.

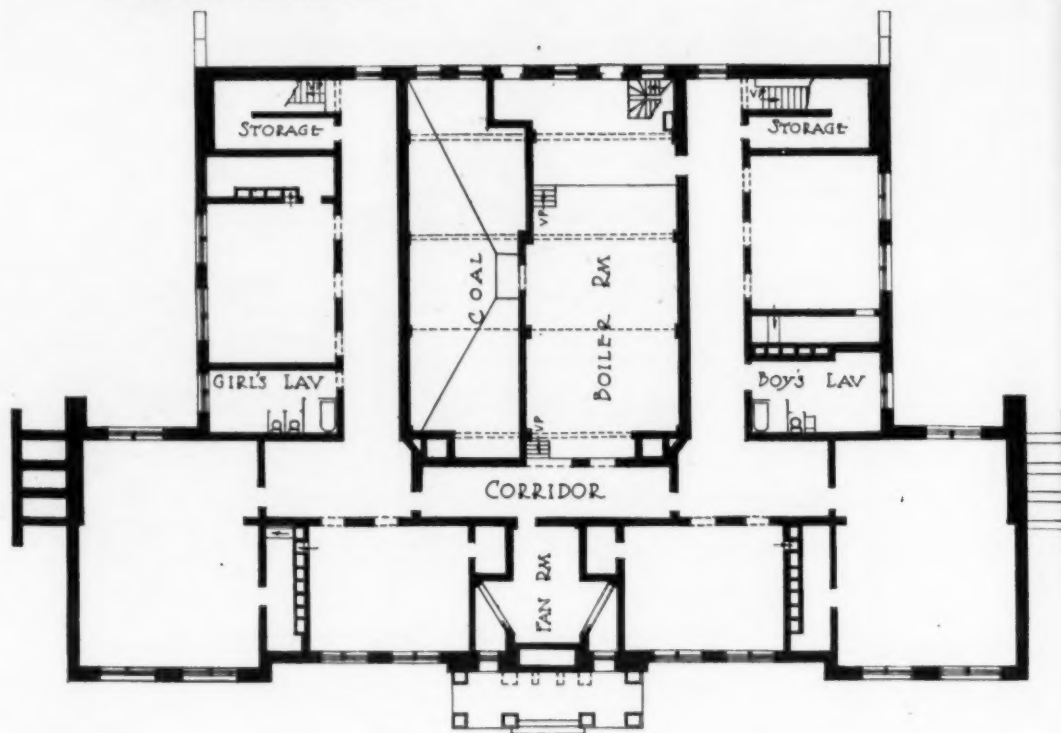
The building, complete and ready for furniture, cost \$80,092.87, or approximately \$166.86 per pupil. This cost is remarkably low when the assembly hall, the special basement rooms and the unusually ample stairs and exits are considered. Including roof and basement content the building cost 16½ cents per cubic foot.

The building was designed by Mr. Samuel E. Hillyer, who has erected a considerable number of successful schools in New York state.

#### A PLEA FOR BETTER SCHOOLHOUSES.

By Prof. J. F. Bowers, Oklahoma Agricultural and Mechanical College.

The poet calls architecture "frozen music." Architecture is, indeed, one of the finest of the industrial arts and the most useful of the fine arts. Its essential qualities have been defined as "utility, stability and beauty" and the aim should be to reconcile these three requirements



BASEMENT, SWIFT STREET SCHOOL.

without sacrificing one to the other.

The educational sentiment of a community is expressed and in turn influenced by the kind of school buildings erected. Hence the building of a schoolhouse carries with it an educational obligation to erect before the eyes of the young people a good model of beauty, grace, dignity, utility and stability. The attitude of the young people toward learning itself is influenced greatly by the building in which learning is to be acquired.

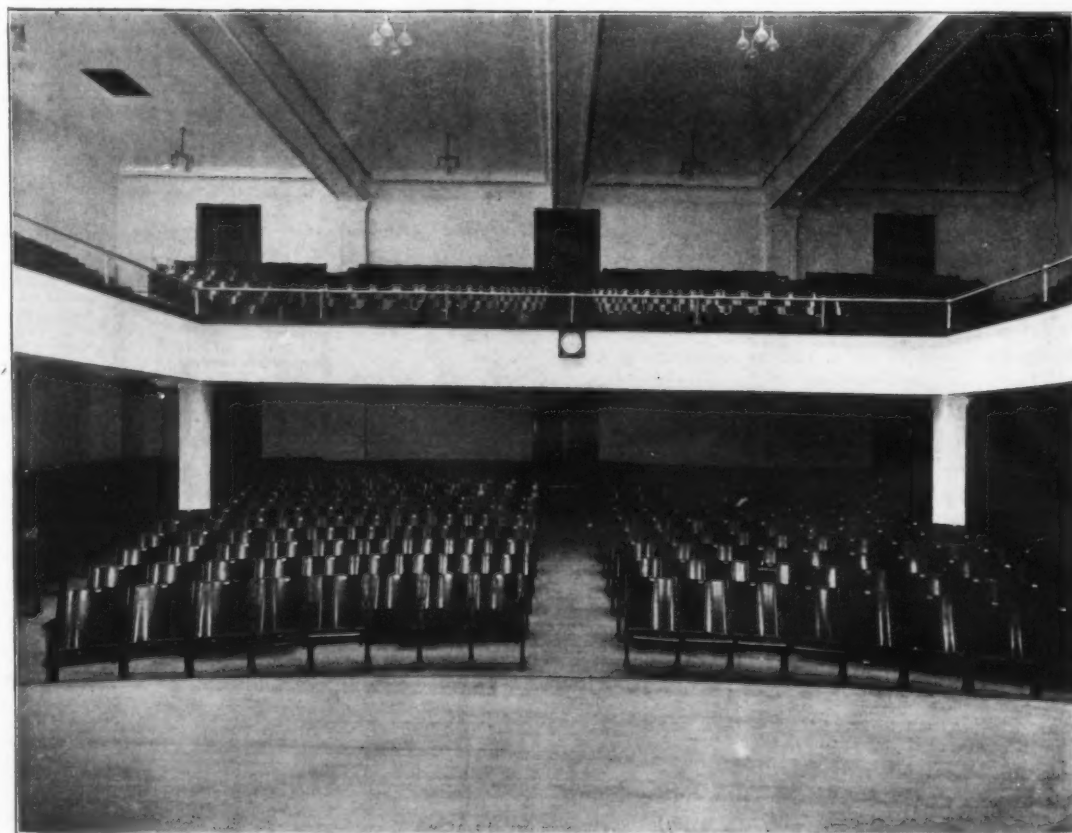
The country schoolhouse, outside and inside, should be as beautiful, comfortable and convenient as the best homes in the community. If the child goes from a beautiful and comfortable home to an ugly uncomfortable school his appreciation for an education suffers accordingly.

Where school buildings are to be erected the usual excuse offered in favor of cheap buildings is the lack of funds. On its face this seems a valid excuse, but adequate funds should be pro-

vided by increasing the school levy or by voting more bonds for school buildings. It is ethically right to vote bonds for good school buildings. Such buildings befitting the future should be paid for in the future. The trouble is not that people lack money for good schoolhouses. The selfish adult population spend money freely for their own pleasures and ignore the welfare of the children.

They do not lack money; they lack that which a good school would help furnish; they lack ideals of thrift, culture, self-control, and regard for childhood.

Weak and shrinking school officials forget the welfare of the rising generation when they hear the never ending cry for economy in public expenditures, and the wail of penurious taxpayers. However, the average taxpayer is usually willing to contribute his share if the money is well spent. Even the citizen who is disgruntled when the appropriations are first made will usu-



AUDITORIUM, WICHITA HIGH SCHOOL, WICHITA, KANSAS.

Wm. B. Ittner, Architect, St. Louis.

(Plans printed in the issue of April, 1912.)



ally laud the enterprise when it is completed if it has been wisely executed.

The school building should be planned with reference to future as well as present needs and should anticipate the probable growth of the community. Either a professional architect or some school man who is well informed on such subjects should be consulted as to size, cost and site of building which must be considered with a knowledge of both local conditions and of schoolhouse architecture as well as educational ideals. The school board knows local conditions but it does not usually know the latest and best things concerning schoolhouse architecture. An architect should be consulted on the following subjects: Materials, arrangement of rooms, sanitary appliances, method of heating and of ventilating, temperature regulation and lighting.

The impression prevails that any local contractor can put up a small school building, but a competent schoolhouse architect should plan even the small building and supervise its construction.

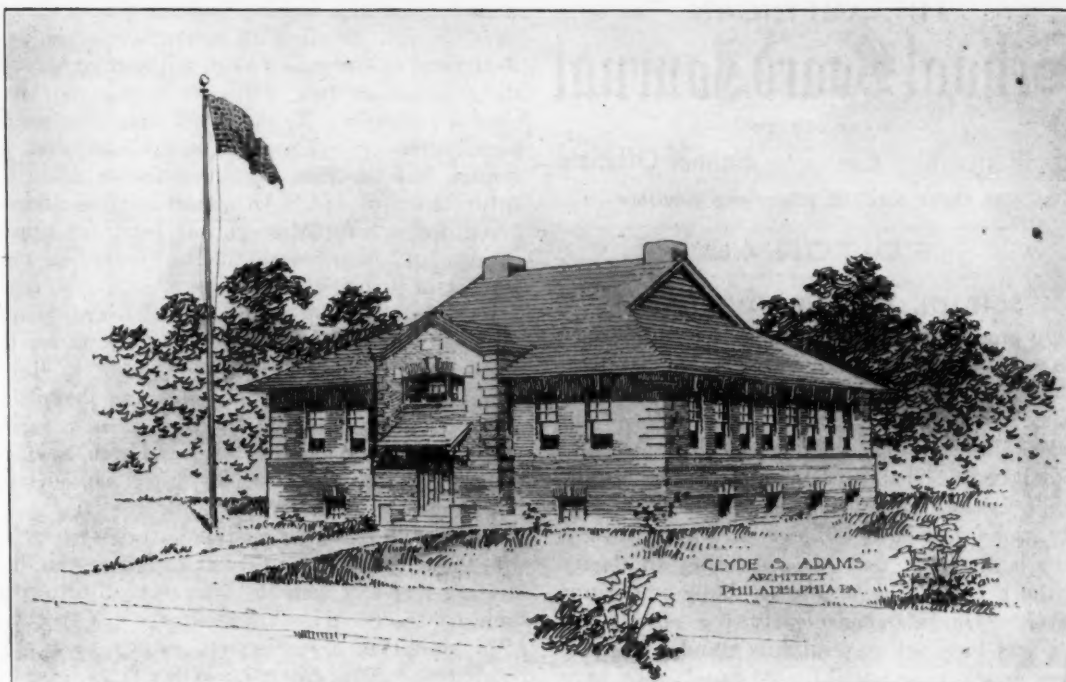
#### COLLINGSWOOD SCHOOLS.

The two new schoolhouses recently completed at Collingswood, N. J., are examples of economical arrangement. The buildings have exteriors of red brick, laid up in white mortar, with white artificial stone trimmings and slate roofs. The design is such that the roofs can be raised at any time to double the capacity of the buildings.

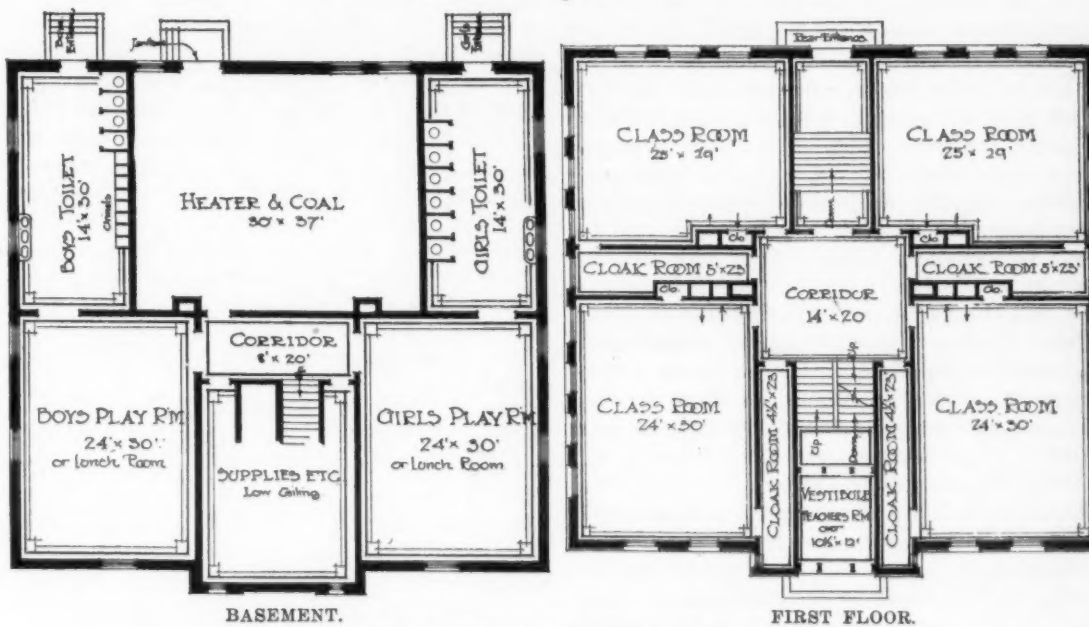
Both buildings have a frontage of seventy-one feet and a depth of sixty-three feet. The basements have a clear ceiling height of nine feet and the first floors twelve feet. There are four classrooms, each seating forty-two pupils, so that when all seats are filled the capacity of each building is 168 children. A teachers' room, serving both as office and retiring room, is located above the front entrance and is reached by stairs from the main corridor. The interior woodwork is yellow pine, finished in a dark brown, with a cast of green; the floors are maple and the walls are plastered.

The sanitary equipment is of the best school type. Heating and ventilation are by warm-air gravity systems, arranged to deliver thirty cubic feet of fresh air per minute, as demanded by the New Jersey school laws. The buildings are wired for electric light.

The cost of each of the buildings was \$7,982, a remarkably low figure, since it includes the heating and ventilating apparatus and plumbing. Figured on the unit basis, the cost was \$45.47 per pupil, or 7½ cents per cubic foot. The plans were drawn and the construction was superintended by Mr. Clyde S. Adams, Philadelphia.



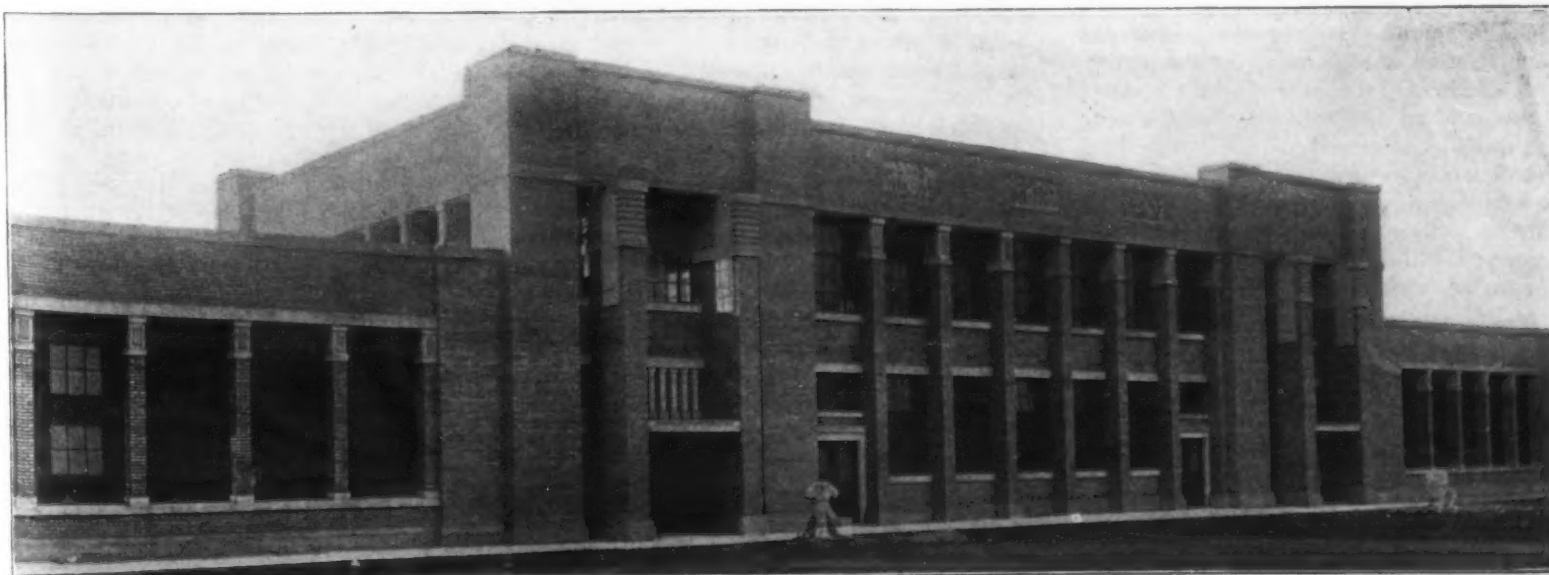
PRIMARY SCHOOL, COLLINGSWOOD, N. J.  
Clyde S. Adams, Architect, Philadelphia, Pa.



PLANS OF PRIMARY SCHOOL, COLLINGSWOOD, N. J.

Extensive plans for providing adequate school accommodations for the children of Philadelphia are being made by the board of education. The program provides for the expenditure of approximately \$4,500,000 in five years. Because of the rapid building of houses in West Philadelphia, the greater number of the proposed new buildings will be erected in that territory. In the downtown section, where there is crowding, three new buildings are to be provided, and

in the northwestern portion additional accommodations are to be procured. The plans include the erection of what will be the largest elementary school in the city. Although the board of education is not prepared to finance the entire object immediately, it is definitely settled that work on five of the buildings will be started at an early date. Plans for two of the buildings have been drawn and will be started at once.



SECTION OF NEW TECHNICAL HIGH SCHOOL, SALT LAKE CITY, UTAH.



# THE AMERICAN School Board Journal

DEVOTED TO

Legislative and Executive School Officials

WM. GEO. BRUCE, Editor and Publisher

## EDITORIAL

## SCHOOL SUPPLY PURCHASES.

On preceding pages of this issue are described the methods employed in buying and handling school supplies for the schools of two important cities of the United States. The descriptions make illuminating reading for the earnest school board official who would carry on his public business as efficiently and as economically as he does his private affairs.

In both cities, there is a striking similarity in the general scheme and in many important details. Quite independently the officials in each city have set up minimum standards which every article to be bought must equal; they have devised guards against irresponsible bidders and dishonest contractors and have taken care that nothing shall be wasted in the storage, distribution or use of school supplies, books and fuel.

While, undoubtedly, the problems in New York City are altogether unique, and the complicated methods which have been employed there successfully are needed in no other community, still the underlying principles which have been worked out and applied hold good for even the smallest village. The idea of concentrating the purchase of school supplies under one responsible man seems desirable for any school district. The setting of a minimum standard of excellence, particularly in educational materials, is maintained more or less everywhere, even though the lowest price idea is still a fetish which prevents a combination of true efficiency and economy.

All school boards can, and must, withhold orders from manufacturers and dealers whose main thought is to make a profit at the expense of decent quality and usefulness. They must learn that every bit of chalk bought must be what it is represented to be before it is paid for. And teachers, principals and janitors must be taught to be moderate in their demands and economical and careful in their use of the teaching aids which are placed in their hands.

And here it must be said that mere economy is not the only watchword in the Newark or the New York schools. The officials are ever on the lookout for better books, for more sanitary furniture and more serviceable materials. There is a liberality in the variety and multitude of articles bought that denotes a keen appreciation of differences in the personality of teachers, of variations in the conduct of schools, and of characteristics in the temper and spirit of neighborhoods. In everything there is an earnest desire to meet the conditions of the schools completely and promptly. But economy is practiced and insisted upon just the same. The interests of the schools are thus promoted without injuring those of the taxpayer.

Every city and village can learn a lesson from the example of New York and Newark, the lesson of efficiency and economy in school supplies.

## MUTUAL RIGHTS.

Complaint is made in some quarters over the unceremonious refusal of certain school boards to re-elect teachers and principals without assigning any reason for their action. It is said,

with considerable justice, that the school officers have no right to allow an instructor to work on to the end of the school year, without signifying their dissatisfaction with his work, and then elect a successor. To do so not only is a severe humiliation heaped upon a professional man or woman but becomes a serious factor affecting future employment. An opportunity should be given for a resignation, or at least for applications in other communities, before a new teacher or principal is employed.

It is quite correct that a school board, if not satisfied with a teacher's work, should throw no obstacles in the way of his future success. Many situations may arise which prevent an able pedagogue from doing satisfactory work in a given school. If, however, he leaves to seek a place into which he fits, no school board has a right to give him a professional "black eye."

It must be said, in justice to school boards, that they are far less guilty of unfairness in dismissing teachers than the latter are in breaking their contracts. How often does not a teacher, after accepting a re-election, calmly resign to receive a higher salary? What school board member has not experienced a hurried special meeting because a principal had written to the secretary that he would not return to the community? But what school board has ever compelled, by legal force, a teacher to fulfill his or her agreement? It is quite true that every teacher must be alert to better himself materially and professionally by allowing no opportunity for a better position or a higher salary to pass by. But, the moral and the legal obligations of contracts, too, must not be forgotten. The damages which a school sometimes sustains from the failure of a teacher to accept his position, cannot be awarded by a jury. They are spiritual losses which cannot be counted in dollars but are measured in stunted growth of children's lives.

In the matter of teachers' contracts both school boards and instructors should be actuated by a spirit of fairness. The former should not dismiss without due cause and ample notice, and the latter should not accept two positions when they can fill but one.

## CLEVELAND'S NEW SCHOOL EXECUTIVES.

The Cleveland board of education has taken a decisive step toward ending the inharmonious condition which has disturbed the schools for a year past by electing Mr. J. M. H. Frederick, of Lakewood, as superintendent, and Mr. Frank G. Hogen as director. The school situation which has existed has been a disgrace to the "sixth city" of the nation, particularly when its former leadership in school board reforms is remembered.

The new superintendent is a schoolman of long experience, who has proven himself to be a man of affairs, a good executive and a professional leader who can inspire a teaching corps. His fifteen years of residence in a suburb of Cleveland have given him an opportunity for studying the local situation at close range, without becoming himself entangled in political or factional troubles. His record shows that he is fearless in dealing with the members of the board of education and that he inspires confidence and loyalty in his teachers. He is able to bring to his new duties an open mind and a free hand that will bring peace and harmony into the schools.

Mr. Hogen's selection is looked upon as equally auspicious. For many years director of public safety he has an intimate understanding of public business in Cleveland and, what is more important, the confidence of the public in his ability and integrity.

The unfortunate legal contest which has been begun by former director Orr for the retention

of the office is the only difficulty now in the way of the board of education. With this removed the schools should soon enter an era of quiet and unity of action such as will make for progress.

## PRINCIPALS AND DRESS.

It appears almost impertinent to discuss, in a critical spirit, the dress and appearance of teachers and principals. And, while the former maintain almost without exception, a high standard of neatness and womanly modesty, it is a sad reflection upon American schools that men principals are far more careless in their personal habits than the average business or professional men holding positions of like importance and dignity.

Lest the truth of this statement be questioned, two instances are cited: Not long ago the leading photographer of a large city arranged to make portraits of the principals of the local public schools. The women were, without exception, prompt in appearing, well dressed and easily satisfied. A large percentage of the men, on the other hand, appeared with unshaven faces and untidy clothes. The photographer declared later that he had never had in his studio such a number of careless men. And all of these were men in charge of large schools, earning from \$1,800 to \$2,500 per year.

An item appearing in the Chicago papers, within two months past, shows that in that city the school management committee of the board, acting upon a complaint from Superintendent Ella Flagg Young, has severely censured a number of the men principals for their slovenliness and has threatened to discharge several unless they "cleaned up." In fact, the names of two principals were mentioned in the daily papers as slated for dismissal.

How can the schools teach children to be neat and tidy in their dress, to attend to teeth and nails, to wear blackened shoes and well brushed clothes, if the principal or teachers are negligent in this respect? What use is home preaching and classroom teaching in the face of bad example? Severe reprimands are due principals who fail to observe the best standards of cleanliness, and dismissal is due to failure to heed a repeated warning.

## AN APPRECIATION OF THE SCHOOL BOARD.

The average school report gives scant attention to the work performed by members of the school board. In fact, the average superintendent is either so busy (to use a slang phrase) "tooting his own horn" or so absorbed in the serious problems related to his work that he cannot find space for a word on the laymen with whom he labors.

It is refreshing to find a tribute like the following in a thoroughly professional report prepared by Mr. M. H. Brasher of Roswell, N. M.: "The success of any school system depends largely upon the board of education. To build up a great school system the board of education must be honest, intelligent, conscientious, self-sacrificing, firm, of splendid business capacity, actuated at all times by the best interests of the schools. The board should, because the members are not professional schoolmen, leave largely the executive, professional and academic part of the school system to the professional judgment of the superintendent, holding him strictly responsible for results, and backing and sustaining him in his acts. All these elements the board of education has certainly possessed to a goodly degree. A superintendent of schools has never had a better, more conscientious board of education than it has been my good fortune to have the five years I have been at the head of these schools. Never was a city more fortunate than Roswell is in her board of education. To them





Suggested by a Recent Political Convention.  
—Williams, Indianapolis News.



In Memoriam: Clarence F. Carroll.



A Long Journey.  
—Westerman, Columbus Journal.

much credit is due for the excellent system of schools. In the last five years this board has had many difficult problems to solve. They have met these difficult problems in an honest, economical, intelligent, far-seeing, masterful manner. They have given the affairs of these schools just as much and careful consideration as their own most private affairs. Every act performed by them has been for the very best interests of the schools. Roswell owes this board of education a great debt of gratitude."

While this recognition of the Roswell school board may appear over-enthusiastic to the cynical, experienced schoolman, it has a ring of truth and a warmth that is rarely found in school reports.

#### ART IN SCHOOLHOUSES

The repelling coldness and bareness of American schoolrooms have been frequently blamed for the dislike which children, as well as their elders, have had for the institutions in which they received their early training. And the question has been asked with considerable force: Why should classrooms, corridors and assembly rooms not be relieved of their monotony by appropriate decorations?

Naturally, the first answer has been—expense, but we are inclined to think that if the matter were probed deeper, indifference and selfishness would be found to be the more potent causes.

Recently a movement has been started quite independently in several places which promises much for improving the interior decoration of schoolhouses. In England, a committee of artists, art patrons, critics and philanthropists has been formed for the purpose of promoting mural painting in schools and other institutions. Young artists and students are to be invited to submit designs and to decorate such

wall space as may be offered, for very small pay or without any pay at all, in order to get useful experience. The idea is to submit all designs to intelligent criticism and accept only truly artistic work. Contributions are solicited but much free work is expected.

In Chicago, the students of the Art Institute have for several years offered their services to the schools of the city and of neighboring communities and have produced very creditable decorations. The subjects chosen and worked out have, in each case, been connected with local history, or with literature or some other subject studied in the school. The work has been subjected to severe tests and, if not great or significant, has at least been artistic and inspiring.

The plan is an excellent one from every point of view and will not only promote an interest and appreciation for art, but also will attract children to the schools and stimulate them in their daily study. The idea is well worth wide acceptance.

#### COMPETITION IN SCHOOL SUPPLY PURCHASES.

Business standards of school boards, particularly in the erection of school buildings and the purchase of equipment and supplies, are constantly improving. The day of "dark lantern" methods has passed in most communities, and contracts are rarely awarded at secret sessions. The contractor who was wont to secure orders by intrigue or even bribery, and the official whose private purse grew fat through crooked deals, have been banished by an awakened public conscience. Today, school boards invite the widest competition and no contracts are awarded to favorites or friends.

An illustration of the new idea in school purchasing was recently afforded by the city of Scranton. The annual award of contracts is thus described editorially by a local newspaper: "An evidence of the closer relationship between public bodies and the taxpayers is had in the fact that some twenty firms shared a few days ago in the distribution of contracts for supplies and material that enters into the work of the school district. Hundreds of people made legitimate bids and there was a healthy competition. The result was that the school district made the best possible deals for what it required and the people got an even break for the money they contribute to support the schools that their children may be educated and grow up into good citizens. The textbook agent or representative of favored concerns in the halycon days was forced to take his chances with honest competitors. Subtle arts and devices for currying favor were not in evidence and from the number of bidders and the varying of their bids it is reasonable to

assume that the gentlemen on the school board performed their duty in a businesslike and honorable manner, for which they are entitled to the thanks of the community."

The movement for industrial education, even if it achieved no other success, would be well worth while in the practical turn which it has given to the common studies. Geography, history, spelling, reading, but above all, arithmetic, have been powerfully affected by the new desire of the schools to train for efficiency and to prepare children directly for the occupations of life.

A western superintendent declares that there are three kinds of teachers, the "born teacher," the instructor of moderate latent teaching ability and the "machine" teacher, who moves mechanically because of some external force.

The first and second kinds are greatly improved by careful, systematic training. They have the teaching instinct; have tried their powers and find the calling to their liking. Their services are greatly in demand and no price which their services bring is too high. The machine-like teacher, on the other hand, rarely grows and no amount of training or experience will raise her above the commonplace. She is expensive at the lowest wage.

Economy in school administration is often best effected by liberality in the expenditure of the school funds. A poor teacher, even at a low wage, is more expensive than a good one at double the price. A \$600 teacher who flunks ten children costs a community more than an \$800 teacher who passes her entire class. Figuring the cost of instruction at \$25 per child, ten pupils repeating a year's work cost \$250 for instruction alone.



The Hero of a Day.



The Summer Cleaning of the Schools.



### A SCHOOL OF INDUSTRIAL ARTS.

The general introduction of manual training and domestic science as subjects in elementary schools has brought school officials face to face with the problem of housing these departments. Their growing importance has made it impossible to relegate shops and kitchens into basement or attic rooms, which are not suitable for regular classrooms, and a number of farseeing schoolmen have insisted upon separate buildings, especially adapted to the needs and comforts of teachers and pupils of manual and industrial subjects.

The motives of school officials who have thus put up separate buildings have been largely based upon the idea of economy, not the economy of penny-pinching, but the larger economy of getting the most value out of the funds at their command for instruction, buildings and equipment. Their claims have been justified as in the case of the Liberty School Sub-District of Pittsburgh, where the energy of Principal J. M. Berkey led the sub-district board shortly before going out of existence, under the new Pennsylvania school code, to put up and equip a building devoted wholly to industrial arts.

#### A Substantial Building.

The Liberty Industrial Arts School is severely plain, and has been planned not for architectural effect but for everyday convenience and practical use. It is a school shop where work is done for the sake of education and studying is done for the sake of work. The building is entirely fire-proof, built with concrete floors and roofs and brick walls. The exterior is faced with tapestry brick, relieved with simple gray sandstone trim. The inside finish is oak against sanded and tinted walls. The classrooms have maple floors laid directly on the concrete. Steam for operating the ventilating system and supplying direct ventilation is obtained from a neighboring school building.

The building houses three departments operated separately under a director and assistant instructors. The basement contains two gymnasiums, each 69 by 34 feet in size, with fourteen feet ceilings. Adjoining the gymnasiums are locker rooms, equipped with shower baths and toilets. Apparatus is provided for light gymnastics and outdoor games. The department is in charge of a trained and experienced instructor who devotes his entire time to the work and also takes charge of the outdoor athletics and play.

#### Shops on First Floor.

The first floor of the building is given up to shops and drafting rooms. In the one-story wings of the building are located the wood-working rooms for beginners and advanced students, respectively. Lathe rooms and space for storing material and tools are provided. The lighting of the shops is nearly ideal. The large windows are supplemented by skylights so that even on the darkest day artificial light is not needed. Similarly the two drawing rooms are well lighted by windows which occupy practically the entire outer walls. For advanced students a heavy machinery room has been fitted. Locker rooms and a room for the men teachers are also found on this floor.

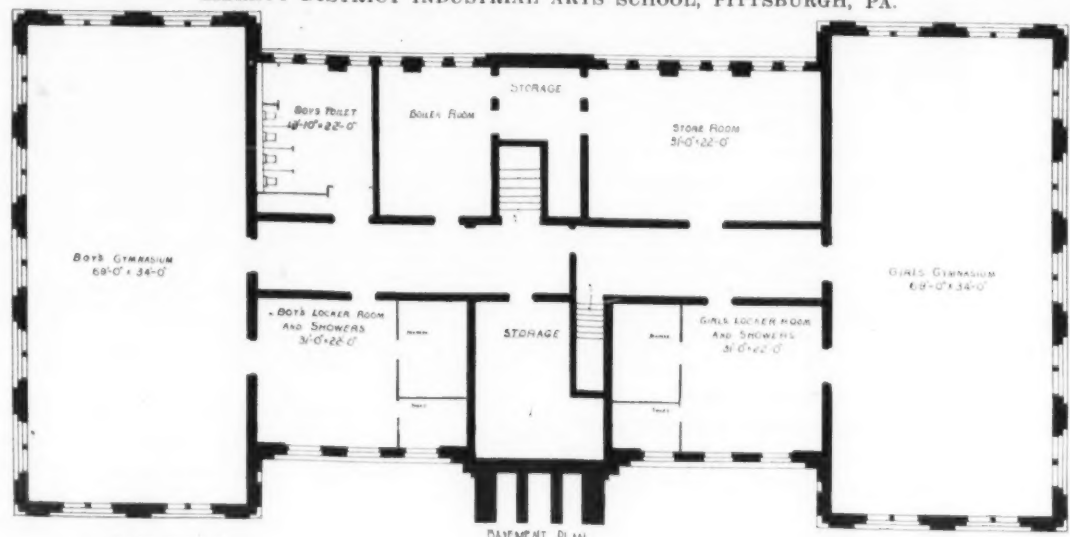
On the second floor there are two large sewing rooms, a kitchen, a dining room, a small laundry, toilets and a retiring room for the women teachers.

The building, when completely equipped, will provide working space for four groups of boys and four groups of girls, twenty-four children in each group. By giving each class one half-day each week, more than one thousand pupils may use the building.

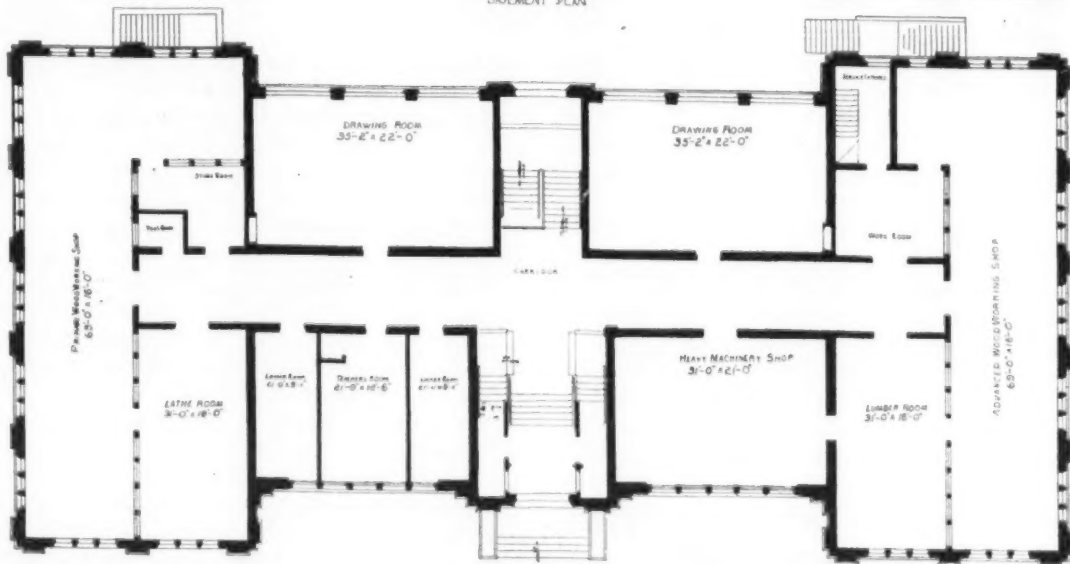
The cost of the building, complete, with equipment, amounts to \$90,000.



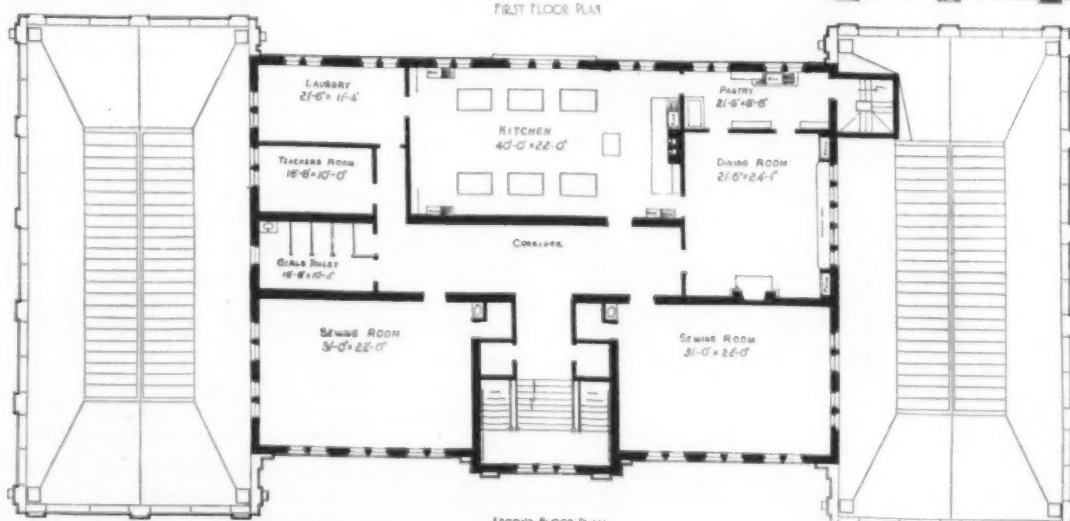
LIBERTY DISTRICT INDUSTRIAL ARTS SCHOOL, PITTSBURGH, PA.



BASEMENT PLAN



FIRST FLOOR PLAN



SECOND FLOOR PLAN

PLANS OF LIBERTY DISTRICT INDUSTRIAL ARTS SCHOOL, PITTSBURGH, PA.



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—O. D. NORTON, Teacher of Shorthand, Lincoln High School, Seattle, Wash.

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## RETARDATION AND ELIMINATION.

During the past few years considerable attention has been given to the progress of the children through the various grades of the primary and grammar school. As a result of careful investigation it has been found that in the various cities of the United States from five to fifty per cent of the children of the schools are retarded, and in the average city the proportion is something more than one-third of the entire school membership. According to the standard usually adopted, all children in the first grade who are eight years of age or older, all children in the second grade who are nine years of age or older, and so on, are considered to be retarded. Thus far the net results of the investigations have been the calling of general attention to the subject of retardation, the proving that retardation exists to a greater extent than authorities have realized and the establishment of an accepted standard for comparison.

The above principles having been established, the second step in the investigation naturally leads to the question of causes and the third step will be the question of prevention. A somewhat careful investigation conducted in the Watertown schools regarding causes of retardation, shows that the same are many and various. One of the chief causes has been late entrance into the public schools. The compulsory education law requires that all children who are seven years of age shall attend school. Many parents, not realizing the absolute injury which they are doing their children, keep them out of school until they are compelled to send them. Of course in a few instances where children are instructed at home, this causes no loss to the child, but where no such home instruction is given, the loss is great and one which can with difficulty be repaired, especially in the case of children who are naturally slow to learn. One cure for this cause of retardation is to be found in an increased activity on the part of the kindergarten and the first primary teachers. Several of the kindergarten teachers of the city

have followed the plan of inquiring from the older children regarding younger children who are of school age and at the same time requesting them to see to it that the younger ones enter the kindergarten. This plan, in many instances, has produced excellent results in the schools following the same, and has greatly decreased the number of children who do not enter school until they are six or seven years of age.

Other causes of retardation have been illness on the part of the pupils and lack of ability to do the required work in the usual time. In some cases retardation is due to misconduct on the part of the pupil and failure to attend school regularly. In at least some instances, slow progress of children has been due to bad eyesight, adenoids or other physical disabilities. By seeing to it that a remedy is found for these ailments in at least a large proportion of cases, the school nurse will do much to eliminate slow progress in the grades.

Overcrowding of classes and lack of individual instruction are other causes of retardation. The management of school systems must constantly give attention to questions of cost. The result is that the primary grades, where one would suppose that individual help is most needed, are, as a matter of fact, the most crowded. Experiments which we have made for short periods of time have convinced us that the lack of individual instruction is the cause of a considerable percentage of failures. Another cause of retardation is beyond question the standard of efficiency required in the schools. We have not yet reached the point in school administration where we require ten talents of one, five talents of another and one talent of a third, according to the mental powers of different pupils, but we expect at least seven and one-half talents from each and every pupil, and if the talents cannot be delivered at the appointed time, the pupil must wait and deliver them later. In justification of this procedure, schoolroom experience clearly demonstrates that the later progress of a child depends upon the thorough-

ness of instruction in the previous grades. The students in the high school who meet the full requirements without complaint and whose progress is uninterrupted are the same ones who as children performed their tasks thoroughly and well in the elementary grades. The students who secure the bare seventy-five necessary for promotion in the high school are, on the other hand, the same ones who just scraped through the requirements of the grades. As a matter of fact, our whole scheme of education constantly keeps in mind the future progress of the child as well as the present progress. The easy tasks of the lower grades lead up to the work of the higher grades; the work of the higher grades leads up to the work of the high school and the work of the high school is in a measure, influenced by the anticipated work of the college. To lower the standard of the schools would be an easy way to eliminate retardation, but one which would doubtless be disastrous in its results. A better plan would be to study carefully the causes, and by doing away with the obstacles to advancement, bring the child up to the accepted standards.—Frank S. Tisdale, Watertown, N. Y.

## SOME THOUGHTS FOR SUPERINTENDENTS.

To persist in thinking that you can do the thing is first aid in qualifying for any supervisory position.

School rules and regulations are, like all laws, the better the simpler they are.

The more persistently a superintendent works for better schools the less trouble need he expect from investigations or "surveys."

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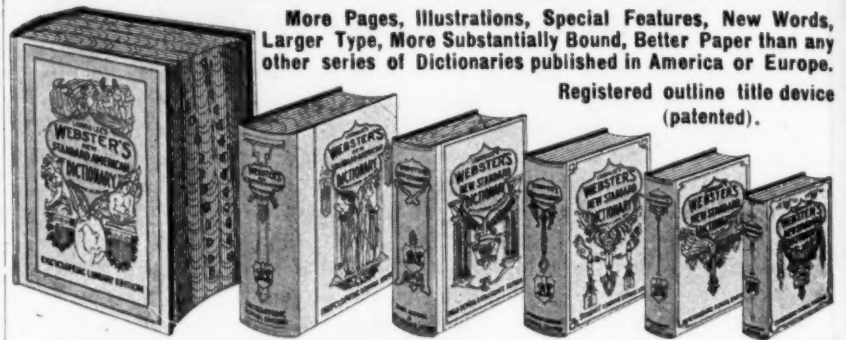
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### APPRECIATION FOR SCHOOLS.

Captain John A. Cobb, president of the school board at Americus, Ga., in an address at the closing of the school year recently pointed out the lack of appreciation by the public for the work of the public schools and the school officers. Mr. Cobb spoke of a condition which is found in practically every community. He said in part: "Our people do not properly appreciate the school advantages that are being offered for the education of their children, or they fail properly to demonstrate it. We hear complaints frequently coming to or spoken of our teachers and our system of teaching, but few and rare commendations.

"One teacher in our schools received a note from the father of one of her pupils thanking her for what she had done for his child. She had received many complaints but this was the only commendation she had received for many years of faithful and efficient work. Are you surprised that she treasures it as one of her most valuable possessions? Another teacher told me of nearly forty pupils in her room three parents had thanked her for what she had done for their children.

"A distinguished jurist told me that he had presided over the courts of his circuit for a long term of years and except for the presentments of the grand juries which were forms, no word of commendation of the people for his faithful work had ever come to him, until his name was mentioned for another office, and that the evidences of confidence, satisfaction and endorsement that had come from individuals, from every quarter, of course, was

very gratifying to him to know the appreciation of his faithful services by his fellow citizens.

"The same with our noble, faithful teachers; how do they know who of you are satisfied with their work when they have labored faithfully with your children day after day for a long series of years, when the only thing they hear are the complaints of the grumblers and kickers. Let this condition of things stop. See or write to these faithful workers for the education and the formation of the character of your children, how thankful you are for what they have done and you will feel better, they will be encouraged to do better work, and your children, hearing only commendation of their teachers at home, will strive harder to benefit by the opportunities offered them for an education. Our schools will be more efficient and successful; your children will be more easily controlled and your homes happier."

### AMONG BOARDS OF EDUCATION.

Protests have been made to the Minneapolis board of education against the order that principals teach classes in addition to supervising. It is claimed that good work cannot be accomplished under these conditions.

The Philadelphia board of education has recently determined to exercise complete control over all student organizations existing in the high schools. Secret societies have been abolished entirely and athletic associations, social and literary clubs are to be conducted under faculty supervision. Rules are being prepared by Superintendent Martin G. Brumbaugh.

Social centers conducted in sixteen Chicago schools during the past year are declared to be an unqualified success in a report received by the board of education. Statistics compiled by Assistant Superintendent John D. Shoop, in charge of the centers, show that 382 sessions were held in the sixteen buildings, with a total attendance of 95,217. During 1910 there was an attendance of 70,870 at 279 sessions held in

nine centers. It is proposed to improve the centers during 1912-13 by better adapting the schoolrooms to social uses. The fixed desks and seats are to be replaced by ordinary tables and chairs so that the rooms can be readily cleared for games, meetings, receptions or dances.

New Brunswick, N. J. The school board has made provision for social centers in the schools. It is planned to have the auditoriums open several nights a week for the purpose of holding entertainments and social gatherings of various kinds. The board has two aims in view, namely, to keep children off the streets and to promote pleasant intercourse between the citizens.

Cleveland, O. Mrs. Sarah E. Hyre, clerk of the board of education, has asked the board's permission to revise and edit the school board rules. Mrs. Hyre believes that all the rules relating to the different departments should be collected into one book. She also advises the insertion of those not included and the elimination of obsolete ones.

The school management committee of the Chicago board of education has criticised the untidy appearance of a number of principals and teachers and, according to press reports, may drop several because of continual disregard of personal cleanliness.

Fond du Lac, Wis. The board of education has appointed a purchasing agent, at a salary of \$150 per year. A clerk has also been secured to assist with the clerical work.

Columbus, O. Four kindergartens have been included in the plans of the board for next year and the sum of \$4,000 has been appropriated to run them. The present appropriation is the first which has been officially set aside for this purpose in eighteen years.

Macon, Ga. The Bibb county board of education has adopted the policy of naming the public school buildings after board members.

Jersey City, N. J. Truancy in the public schools has been decreased largely through methods employed by truant officers and the humane

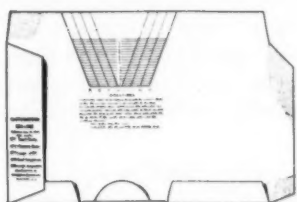


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treatment administered to wayward children. During the last term seventy-nine cases were reported and it is expected that the present one will show a decided decrease.

According to Supt. A. J. Demarest, there are two types of children who seek to evade the compulsory school law, namely:

Children who "want to go to work" before they have reached the age at which they are permitted by law to leave school, and children who prefer neither to go to school nor to work.

"The last named," says Mr. Demarest, "is in a great measure responsible for the 'gang' formations, which today have a great tendency toward increasing incorrigibility and truancy. Most of the offenders are not thoroughly bad boys, and if given proper treatment they seldom continue to be wayward.

"I find that the railroad tracks, the steamship lines and moving picture houses are, in a great degree, a direct cause of their truancy.

"The social phase of the work of truant officers has increased more and more during the past few years due to the fact that the investigations have shown many of the causes for habitual absenteeism to have originated in the lack of shoes or clothes or food or sickness. In aiding these pupils much assistance has been received from the several charity organizations, citizens and teachers and officials of the schools.

"Investigations have revealed that many truant are of needy families. When children are not properly clothed they are at once filled with humiliation when compelled to go to school with friends clad in cleaner, newer garments. It is only human that they should be seized with a desire to remain away from school to hide the evidence of the family's need."

The school board of Kansas City, Mo., is taking steps to introduce motion-picture machines as a regular feature of instruction offered in the public schools. Such subjects as geography, physics, physiology, history, natural history and botany will be taught by means of the pictures.

A room in each school building will be especially fitted to show the pictures and classes will take turns in viewing them. It is proposed to establish a film exchange in the school board headquarters so that continuous exchanges of subjects can be made. A modified type of projection apparatus will be bought.

New York, N. Y. A savings system will be installed in the schools next year. It is expected that before next spring half a million children will possess bank accounts.

Lowell, Mass. The school committee has voted to request the city council to accept the provisions of the act of 1911, which provides that any city or town desiring to make use of the school buildings for other than educational purposes may do so upon its acceptance by a two-thirds vote of each branch of the city council or corresponding body and the approval of the mayor.

Boston, Mass. The school committee has voted to request the state board of education to fix the rate of tuition in the evening industrial schools at \$6 per month and the rate for non-resident pupils in the household arts class of the continuation school at \$4 per month. It is also proposed to exact a fee of \$100 for non-resident pupils in the secondary schools, \$37 for those in the elementary schools, \$19 for those in the evening high school and \$18 in the evening elementary school.

The next meeting of the New York State Teachers' Association will be held in the city of Buffalo, Monday, Tuesday and Wednesday, November 25, 26 and 27. It is probable that the precedent of last year will be followed in the closing of all schools, including and west of Rochester, and boards of education will give their teachers time to attend this important educational meeting. An exceptionally strong program has been prepared and every department of school interest will be represented in the section meetings from the kindergarten through the university. An exceptionally large

attendance is expected. The local organization has provided everything possible for the convenience, comfort and enjoyment of their guests. Information concerning the arrangements for the meeting may be secured from the secretary, Richard A. Searing, 226 Bryant street, North Tonawanda, N. Y.

Joplin, Mo. Supt. A. H. Bushey has outlined a course of study for evening classes for the coming year. It is proposed to conduct the school primarily for those past school age who desire to acquire an education and to assist foreigners who are anxious to learn English or other branches.

Philadelphia, Pa. A department of supplies has been created, with Mr. M. H. Savage in charge. The salary has been fixed at \$2,300.

Bridgeport, Conn. School savings deposits, on June first, reached the large sum of \$14,000. The system was started in January and it is expected the total should reach \$16,000 before the close of school.

Grand Rapids, Mich. The school board has recently employed the Wernette-Bradfield Company as consulting engineers. The firm will make coal tests, give advice on the purchase and installation of machinery and render general expert service in regard to engineering work. Its duties, however, will not include the making of plans and specifications for heating, ventilating or lighting of buildings.

The school laws of South Dakota are to be codified by a joint committee of nine men representing education and legal interests of the state. The State Teachers' Association, which attempted the task, failed in its purpose and now has enlisted the Bar Association and the States Attorneys' organization to assist in devising a measure which will meet the approval of the legislature.

That the schoolhouses shall be open for all public gatherings of a civic nature is the decision of the Peoria board of education. Previous to the May meeting of the board the assembly





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halls of the school could be used only for school entertainments.

The school board of Lebanon, Pa., has recently placed itself on record to increase the salaries of such teachers as the superintendent may recommend because of superior efficiency. In making recommendations, the superintendent is to take into account:

Teaching ability, success in discipline, growth in professional knowledge and skill, growth in general culture, moral influence in school and the community, fidelity in performance of duty.

Money-raising schemes promoted by teachers and principals have been severely scored at a recent meeting of the Omaha board of education. The case of a school where much embarrassment was caused to pupils whose parents are in modest circumstances was cited. The teachers proposed a collection of \$25 to buy pictures and statuary; then, set the objective sum at \$100 and, finally, asked \$200. A rule of the board prohibits the collection of funds and the members have affirmed their intention of enforcing it to the letter.

Red Wing, Minn. The board of education is planning the establishment of a tree nursery in the school gardens. Three thousand trees have been planted and it is expected that shade trees for the city streets will be provided in a few years.

Defective children are to be given special attention in the schools of New Orleans. The Board of Administrators of the Tulane Educational Fund, which administers Tulane University and Sophie Newcomb College, has made a proposition to the school board of New Orleans that each body appropriate \$1,500 per annum for the special work of finding defective children in the public schools and recommending special treatment. The psychological laboratory of Newcomb College has been tendered for the use of the examiners and Professor David Spence Hill, of Tulane University, has offered to examine suspected defectives free of charge. The proposition of the Tulane administrators was referred by the school board to its finance committee and is now being considered.

Most of the larger cities of the country regard the marriage of a school teacher as tantamount to a resignation, but probably never before has a member of a board of education lost the office by marrying. That is the experience

of Mrs. F. L. Bowman, of Bogota, N. J., who had served one term and was re-elected. She married Mr. Bowman, who is by birth a Canadian and has never become a citizen of the United States. A federal statute provides that an American-born girl, on her marriage to a citizen of a foreign country, relinquishes all rights and privileges as a citizen of the United States.

So, Mrs. Bowman, after consulting counsel, decided not to qualify as a school trustee. She is said to be considering an application for naturalization in order to regain her citizenship.

Woman suffrage enthusiasts express the opinion that the naturalization and marriage law imposes an unjust disability upon female officeholders. They may, however, find some balm in the supposition that the lady's new relation may be considered by herself full compensation for her loss of office.

Miss Sophie B. Wright, educator, lecturer and known throughout the country for her zealous work in charity, died in New Orleans June 10. Miss Wright was the first to establish free night schools for young men in New Orleans and in recognition of her services in the cause of education and earnest work in local charities one of the new girls' high schools was named in her honor, The Sophie B. Wright Girls' High School. She established and conducted the Home Institute, a school for young ladies and, although a cripple, she was extraordinarily active in every move for the relief or betterment of her people. She was a national officer of the Kings' Daughters.

Ann Arbor, Mich. According to a report presented by Dr. Anna Dieterle, dental inspector for the schools, out of 1,500 children examined, less than a fourth had perfect teeth and 243 had never been to a dentist.

### ILLITERACY IN THE UNITED STATES.

Considered without qualifying circumstances, the latest official reports indicate that three persons out of ten thousand in Germany are unable to read or write, while the proportion of illiteracy in Great Britain is 150 per 10,000 as against 770 per 10,000 in the United States. These figures are based on a comparison of illiteracy among some of the leading nations which has just been made by the United States

Bureau of Education. The Bureau has used the preliminary figures of the 1910 census for this country, and the latest official reports available for the others.

Although America seems to make a bad third in the comparison, the Bureau calls attention to circumstances which tend to put a much better face upon the matter. Thus, the American figures include the entire population more than ten years of age, while the German figures cover only the army recruits, and the British statistics are based on data drawn wholly from official marriage registers. Hence the German and British statistics deal only with adults, and generally speaking, with physically and mentally normal adults, while the United States census includes without discrimination everyone above the ten-year age limit.

Again, it is pointed out, the showing of the United States is brought down by reason of the fact that the country has a large population of foreign-born whites as well as of colored persons, among whom the percentage of illiteracy is 12.8 per cent and 30.5 per cent, respectively. The illiteracy among the native whites of this country is only 3 per cent.

Density of population has an important bearing on the problems incident to bringing the children together for purposes of education, and therefore is an important consideration when discussing illiteracy statistics. In this connection the document shows that the number of inhabitants per square mile in the German Empire is more than 310, in Great Britain practically 463, and in this country just a trifle over 30. France, with a population of 189.5 persons to the square mile, has 11.4 per cent of illiterates in its population over ten years age. This includes a large number of persons who never had the benefit of compulsory education laws, which were enacted in 1882.

The great nations of western Europe are compared with the United States for the reason, among others, that like this country, they have well-organized systems of public instruction. The Bureau of Education's examination of five nations of southern and eastern Europe shows that the proportion of illiteracy here runs from 26 to 70 per cent. The lowest ratio for this group exceeds that for the southern states of the Union, where the greater part of the American colored population is massed.



# VOCATIONAL GUIDANCE IN SCHOOLS.

What New York State is Doing.

By Arthur D. Dean, State Commissioner of Industrial Education.

While it is true that the time has passed for the let-alone policy of fitting people for vocations, there immediately comes up the tremendous questions: Whom shall we fit? For what shall we fit? How shall we fit? Vocational guidance and vocational schools are intimately related. We need not only vocational schools, but also information as to the conditions of employment, the wages, the future prospects of various occupations, as well as a knowledge of the educational opportunities and requirements for efficiency in the occupations. It is quite clear that provision for adequate training, for systematic counseling and for definite knowledge of requirements of trade and industry go hand in hand. An organized plan is needed for advising young people as to the continuance of their schooling and the choosing of their life work.

## What European Countries Do.

In Germany and Scotland well organized departments in the public schools have been established for this work. It does not consist of mere advice to pupils; neither does it concern itself merely with the functions of an employment bureau. It does aim, through knowledge of the pupil's makeup, to give good advice, to guide him into the right kind of school and then to assist him in getting the right sort of a job. The duties of the Edinburgh bureau of educational information and employment follow:

1. To interview boys and girls and their parents or guardians, and advise them with regard to further educational courses and most suitable occupations.
2. To prepare leaflets and pamphlets or tabulated matter giving to the pupils information about continuation work.
3. To keep in touch with the general requirements of employers and revise from time to time the statistics about employment.
4. To prepare and revise periodically statements of the trades and industries of the district, with rates of wages and conditions of employment.
5. To keep a record of vacancies intimated by employers, and to arrange for suitable candidates having an opportunity to apply for such vacancies.

The city of Munich issues a series of little hand books, now over 100 in number, which fully analyze the possibilities of the various vocations. If our boys knew more about the years of patient waiting, or waiting for patients, or the average income of a New York City doctor, perhaps the profession would not be so overcrowded. If the public knew that the mason, although he may receive \$8 a day, works only on an average of 176 days a year, possibly there would be more fairness of statements regarding the wages paid this mechanic. If parents knew that men in brass foundries often had pulmonary troubles, they would hesitate to apprentice weak-lunged boys to the industry. If a boy really knew that low wages at the start may mean high wages at the end, he would not be so anxious to get at the automatic machine, which, through piecework, pays him not to learn something for himself, but to earn much more for the company. Possibly there would be fewer children going into the blind alley of industries, if they knew it had no opening at the other end.

## Part of Conservation Movement.

The movement for husbanding the serving powers of youth is ever increasing its range. It is a part of the cry for conservation. In four cities of New York State the beginnings have been made looking toward a more extended knowledge of the demands and opportunities of trade and industry.

For several years the students aid committee of the High School Teachers' Association of Brooklyn, the chairman of which is E. W. Weaver of the Boys' High School, Brooklyn, has done valuable work in assisting boys to define, before leaving school, their purposes in life and to consider the occupations best suited to realize them. Vocational petitions have been prepared for the boys and their parents. Nearly twenty leaflets have been published, with such titles as "Opportunities for Boys in Machine Shops," "Choosing a Career," "Vocational Adjustment of the Children of the Public Schools." A department of vocational guidance for the public schools of New York City has been recommended by the City Superintendent.

The Board of Education of Poughkeepsie, through an expert and with the assistance of the city teaching force, has compiled a pamphlet which it is expected will be of some help to girls leaving school in securing the first condition of success—knowledge of a chosen vocation.

The Board of Education of Jamestown has established a vocation bureau, which is under the direction of the high school principal, the principal of the junior department, the principal's clerk, the director of manual training, the supervisor of drawing, a commercial teacher and one section teacher from each of the four classes appointed by the president of the council. The purpose of this bureau is: (1) to furnish information and directions to pupils preparing for college

(Concluded on Page 38)



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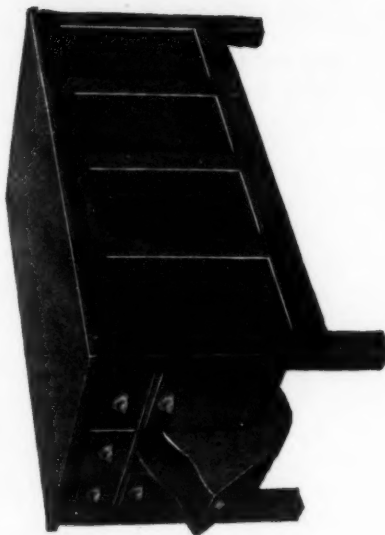
**SKILLED MECHANICS** are employed in its manufacture, and school furniture so well made will give long service and naturally prove much better in the end than cheaper grades which are sold for about the same price.

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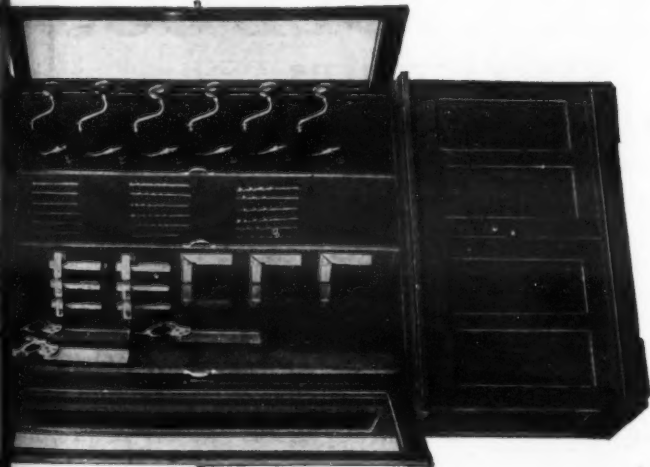


departments  
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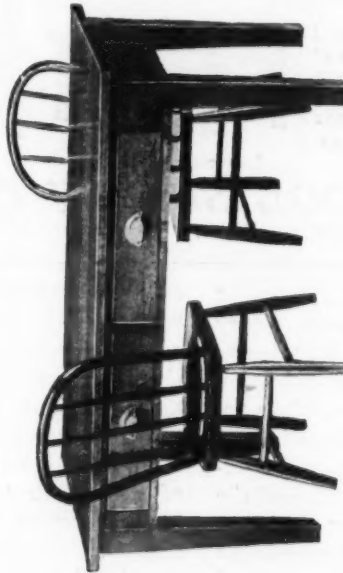
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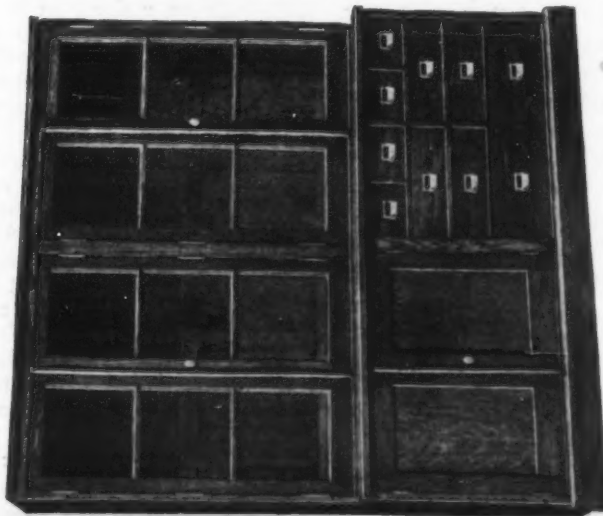
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with the sliding tool rack tops and universal base sections allow the maximum amount of usable storage space for tools and supplies. Top has eight sliding boards for tools, and when drawn out swing to either right or left.



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Our construction warrants our guarantee. We take pride in our furniture and are glad to be identified with it and want our friends to be the same. We stand ready to replace any of our equipment which shows defects in construction, workmanship or finish.



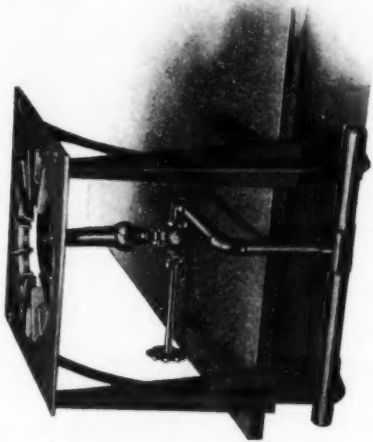
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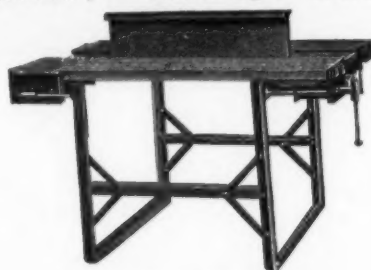
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INDIANAPOLIS, IND.

or other institutions of learning; (2) to assist pupils who may need help in securing temporary employment in vacation and out-of-school hours; (3) to assist pupils not pursuing their education beyond the high school in determining their vocation, and where possible to assist them in preparing therefor; (4) to help pupils to secure permanent positions, but it is not the policy of the bureau to recommend for permanent positions pupils who would otherwise remain in school; (5) to keep a record of the pupils who leave school before completing their course, and the reasons for their leaving—this with a view of doing what may be done to remove the causes and of getting those who leave to enter the night school; (6) as far as may be possible, to co-operate with parents in the matter of vocation for pupils; (7) to ascertain and classify the various vocations best suited to young people with high school training, and to collect such information as will assist them to make their choice, and (8) to co-operate with employers (especially in Jamestown) who may need the services of young people with high school training or who may furnish assistance and information necessary to the work of the bureau, and to invite their assistance.

The principal of the Buffalo Technical High School has organized a bureau within his school which outlines a plan very similar to Jamestown. The Buffalo plan has one great advantage over all others—it is accompanied by a system of vocational training within the school system.

The increasing complexity of our social and economic conditions makes it constantly more difficult for schools to fit in with the life about them. The number of vocations now open to youths of both sexes has greatly in-

creased. We need vocational training; but we need, as well, vocational knowledge based upon careful investigations. Every school principal should know the industries of his locality, the conditions for entrance and the possibilities for success. The vocational teachers at least must have the information; it is a part of their work to search out the opportunities for preparation, as well as to provide the preparation. The interest in the movement for vocational guidance is now quite generally recognized.

#### CLEVELAND'S NEW SUPERINTENDENT.

The Cleveland board of education, on June 8th, ended the suspense and the public clamor concerning the superintendency by electing Mr. J. M. H. Frederick to succeed Miss Harriet Keeler, as chief executive of the public schools.

Mr. Frederick is a native of Ohio, having been born on a farm in Summit county, near Akron. He attended the district school and later a "public select school" at Copley, a village west of Akron. He entered Hiram College for his preparatory training and graduated from Amherst in 1886.

He taught a year at Amherst, and in 1887 came to Cleveland to take an editorial position on the "Leader." For nine years he followed newspaper work in Cleveland, in Nebraska and in Akron. In 1895 he accepted the superintendency of the public schools at Lakewood, a suburb of Cleveland. The school at that time had only nine teachers. When Mr. Frederick stepped out in 1910, the eighty-one teachers under his supervision, risked their places to give him a testimonial of loyalty and appreciation.

In an interview given to the press, after his election, Mr. Frederick said:

"To simply work out an academic curriculum is a small part of the superintendent's duties, as I see them. I believe in introducing the natural method of study to the child, in a way

that will make his studies appeal to the interest.

"I have some theories, if you care to call them that," and over his face spread a smile that accounts for his hosts of friends, "but now is not the time to talk of them. We must first take into account the situation as we find it and build upon what we have.

"About politics in our schools—we cannot infringe on personal liberty. If an individual cares to get into politics we cannot stop it. But teachers as a body or as an organization in politics will not be tolerated. It is deplorable to have politicians mixing in the schools, but it is more deplorable to have our schools mixing in politics."

#### A WESTERN TEACHERS' ASSOCIATION.

D. H. Christensen, superintendent of schools of Salt Lake City, has worked out a plan to form a Western Association of Teachers, holding its first general convention in San Francisco during the Panama-Pacific International Exposition in 1915, and the plan is approved by leading educators throughout the west. James A. Barr, secretary of the California Teachers' Association, and Editor Arthur H. Chamberlain favor the movement and are employing their efforts toward its consummation, working on a program for a preliminary organization. They have the assistance of the heads of the principal colleges and of superintendents of schools of the largest cities of California and leaders in education from Oregon, Washington, Idaho, Montana, Colorado, Utah, Nevada, New Mexico, Arizona and Wyoming.

Superintendent Christensen has informed the leaders of education in the eleven western states of his plans and asked their views and the educators are practically unanimous in favor of forming the association.

Cincinnati, O. Special instruction for pupils who stammer will be given next year. Recent experiments have shown good results.

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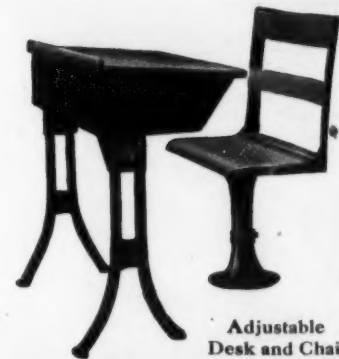


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### For Busy Superintendents.

Superintendent Ben Blewett, of St. Louis, has been re-elected, at an increased salary. Mr. Blewett has proven himself an exceptionally strong executive, a splendid professional leader and a tactful, progressive public official. He has been getting results and St. Louis is to be congratulated in retaining his services.

The school board of Pittsburgh has approved the recommendation of Supt. S. L. Heeter providing for semi-annual promotions to be made at the Christmas holidays and at the end of the school year. Formerly promotions occurred only at the end of the summer vacation. In the high schools, Mr. Heeter proposes that the courses will be reorganized to conform to the various callings which the students have in view. These will include classical, commercial, art, industrial and a general course modifying the classical and including features of the others which the pupils may select. Thirty-two credits will be required for graduation. These are to be divided into eight credits for each year, or four for each unit of half a term.

Stratton D. Brooks, formerly superintendent of the Boston public schools, has begun his administration of the University of Oklahoma with characteristic vigor. One of his first official acts was to request permanent tenure of position for all the professors of the institution, instead of annual re-election.

W. E. Striplin, superintendent of education in Gadsden, and prominent in educational affairs of Alabama, died on May 26th, following a hemorrhage of the lungs.

Mr. Striplin had been superintendent of schools in Gadsden since 1901. He was born in

Clay County, Alabama, forty years ago, and graduated from Oxford College. He served as president of the Alabama Educational Association for one year. He was also editor of the Educational Exchange and had been engaged in educational work all his life. Last February Mr. Striplin attended the meeting of the National Education Association at St. Louis, and while there fell ill with pneumonia. He was brought home and had almost recovered, when he suffered a relapse.

Supt. Geo. S. Ellis, of Whitehall, N. Y., has recently resigned to become associate manager of the Phoenix Mutual Life Insurance Company for the state of Maine. Mr. Ellis will reside in Portland and will have direct charge of the agencies of the company. He has been superintendent of schools at Whitehall for five years and has administered the schools there with marked success.

The school board of Harrisburg, Pa., has recently revised its rules to empower the superintendent to assign and transfer teachers, subject to a vote of approval.

Sioux City, Ia. Supt. M. G. Clark has been authorized to open a summer review school. Formerly the work was conducted without the sanction of the board of education and with no supervision by the superintendent. It is expected that under the plan of placing the work under the control of the school authorities a more uniform course will be followed. The school will continue for eight weeks, beginning June 17th and ending August 9th. Sessions will begin at 8:30 and end at 11:30, for five days each week.

The following rules have been made to govern the conduct of the school:

The pupils will be required to attend under the conditions of punctuality and regularity that prevail in regular school sessions. Pupils following either the high school or grade work will not be allowed to take more than two full subjects, not counting penmanship or spelling.

A recommendation from the teacher or principal

must accompany each application for entrance to the school. The tuition for the term will be \$15 for high school work and \$10 for grade work. Not more than fifteen pupils will be allowed to one teacher. Regular examinations will be required at the close of the term.

Newton, Ia. Supt. E. J. H. Beard has resigned after twenty years' service in the schools.

Supt. Irving B. Bush has been re-elected by the school board of Parkersburg, W. Va., for a term of two years, at a salary of \$2,500. A local paper, in commenting on the action of the board, says: "When the board of education re-appointed Mr. Bush it did a wise thing. Mr. Bush is the right man in the right place, and he should be kept as he is as long as possible. He is efficient and discharges his duties without friction, which is something lots of other able men cannot do. This is a quality absolutely essential in the educator, or he will largely lose his usefulness in any one place in a year or two."

Wabash, Ind. A school savings bank was started last fall by the school authorities, the purpose being to encourage thrift among the pupils. At the end of the term the announcement is made by Supt. Orville C. Pratt that 550 pupils have deposited a total of \$1,546.14.

Eleven new supervisory positions, involving an annual expenditure of \$25,000 for salaries, have been created by the Pittsburgh board of education, upon the recommendation of Supt. S. L. Heeter. The offices and the appointees are: Associate superintendent, C. H. Garwood, of Pittsburgh, \$4,000; assistant district superintendents, Robert M. Sherwood and L. S. Baker, each \$3,500; director of art, C. Valentine Kirby, of Buffalo, \$3,000; physical training, Dr. W. L. Savage, \$3,000; director of special schools and extension work, G. E. Johnson, \$3,000; household arts director, Miss Irene E. McDermott, \$2,500; director of writing, E. G. Miller, \$2,500.

The courses of study in the San Francisco high schools have been unified, following a meeting of the school directors, high school prin-





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cipals and teachers. It was found that pupils leaving one institution and entering another were placed at a disadvantage because of the difference in courses of the various schools. It is proposed to make the studies identical so that in the future pupils who leave one school may enter another without any loss of time or effort.

St. Louis, Mo. Supt. Ben Blewett believes the school years of city children are not long enough and that the law which fixes six years as the lowest age for admission is the cause of a great waste of time. He has urged that the child be placed in the kindergarten at five years of age that he may be prepared for regular primary work when he reaches the age of six. Mr. Blewett, in speaking on the subject before the superintendents at Jefferson City, Mo., said:

"I do not believe in forcing a child to go to school too young. If one had a big house and grounds for a little one, with the mother able to give almost her undivided time to the child's elementary training, I should be in favor of keeping him out of school until he is nine. But what percentage of city children have such advantages? The proposed kindergarten work will not be compulsory, but it will help thousands of the submerged to get their heads above water. There are between 9,000 and 10,000 children in St. Louis waiting for just such a chance."

New York state teachers will meet in Buffalo on November 25th, 26th and 27th. The date was arranged by Supt. Emerson, of Buffalo, Principal Percy Bugbee, of the Oneonta Normal School, who is president of the association, and Richard A. Searing, of North Tonawanda, the secretary.

Roselle, N. J. The board of education proposes the introduction of departmental teaching in the grades above the fifth. It is expected that the teachers of these grades will each take one or two studies covered by the grades, and that all pupils in the same subject will be instructed under one teacher.

Jere M. Pound, former state school commissioner of Georgia, has been elected president of the State Normal School, at Athens, Ga.

Wichita, Kans. Supt. L. W. Mayberry, of Iola, Kans., has been selected to succeed G. W. Kendrick. Mr. Mayberry will receive a salary of \$2,750.

Rockford, Ill. The tuition for non-resident students in the high school has been increased

to \$40 per year. At present the cost of conducting the school reaches \$46 to \$48.

Following the lead of Pennsylvania, there has been introduced into the Constitutional Convention of Ohio an educational system based largely on the plan of the Pennsylvania school code. It provides for a state board of education of at least five members to be appointed by the governor; also for a permanent state school fund to be made up in part of revenues derived from lands reforested by the state in the future.

Recently there was introduced into the legislature of Massachusetts a bill identical with the Pennsylvania Code provision requiring an inspection of institutions wholly or partially supported by the state and maintaining educational departments not now supervised by public school authorities. Pennsylvania has over a hundred such institutions receiving appropriations for maintenance amounting to over five millions of dollars.

Joliet, Ill. Supt. E. F. Worst has been re-elected, at a salary of \$4,000.

Springfield, O. Supt. Carey Boggess has been re-elected, at a salary of \$3,000.

San Francisco, Cal. Supt. Alfred Roncovieri has devised a method of establishing closer relations between teachers and pupils in the schools under his supervision. He proposes that teachers "visit around" the homes of the pupils during the term, endeavoring to establish cordial relations between home and school. In a letter addressed to teachers recently he said:

"If parents cannot visit the school, teachers should visit them at least once during each term to get acquainted and to gain a sounder appreciation of the surrounding conditions that the children encounter outside of school hours. A kindly and sympathetic visit to the homes of indifferent and sometimes neglectful parents will give a teacher a realization of the obstacles that interfere with a child and that must be overcome in such homes.

"In such cases the teachers must awaken the parents to the importance of education for their children. Such visits are to be paid not only to the homes of pupils whose records are unsatisfactory, but to those whose work is satisfactory as well, for words of encouragement count for much in all cases."

Lynn, Mass. The school board has recently added wood and metal turning, printing and do-

mestic science to the evening high-school course. The classes will be in session three evenings a week.

Arthur H. Robertson, of Muskegon, Mich., has been elected superintendent at Paw Paw, Mich.

Oshkosh, Wis. Supt. M. N. McIver has been re-elected.

Helena, Mont. Supt. John Dietrich has inaugurated a plan for supervising child play on the school grounds.

The purpose of the movement is to develop an interest in certain forms of amusement among all the children, and for the further purpose of having them participate collectively in the fun which goes on on the school grounds. It is a movement which will be conducive to a more friendly and brotherly spirit among the children, and will benefit them individually and collectively. Under the direction of a supervisor all will participate in the games, and while they are thus engaged they will not be permitted to exert themselves to a point of fatigue, as in some cases children do. The games which have been selected are captain ball, center ball, teacher, telegraph, cat and rat, slap catch, bean bag and relay races. Most of the above games are played with ball and to play them the boys and girls assemble in groups of from five to eight persons.

The Vevay, Ind., school board has recently adopted a resolution requiring all teachers to pursue a twelve-weeks' summer course at some normal or college in order that they may keep in touch with the best educational thought and methods of teaching.

New Orleans, La. The board has considered the adoption of a psychological system of tests for delinquent pupils. At a former discussion of the subject, Supt. J. M. Gwinn placed the matter before the trustees of the Tulane Fund. It was decided to appropriate \$1,500 provided the school board added a similar amount for the work. A resolution was adopted providing for a special instructor.

Halstead, Kans. Domestic science has been installed in the schools.

Nebraska City, Neb. The board has passed a rule requiring high school students to deposit \$1.00 to insure return of books used. The amount is refunded upon the safe return of the books.



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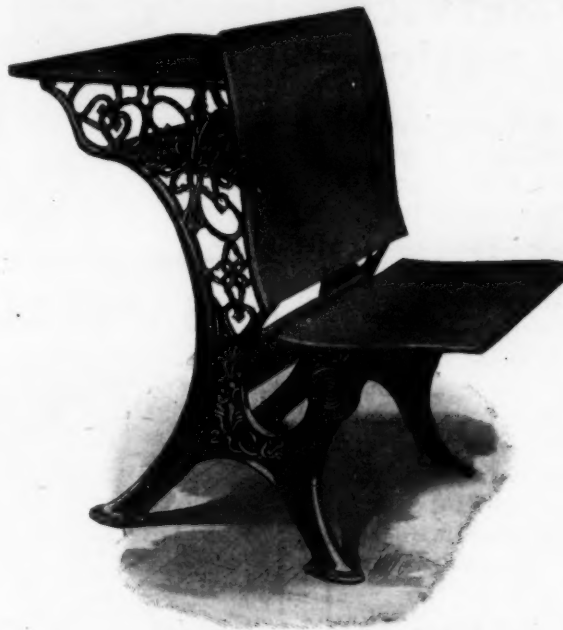
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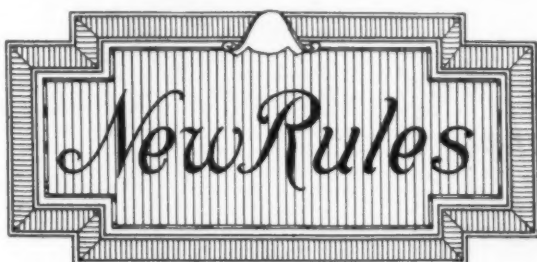
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#### Janitors' Rules.

Pittsburgh, Pa. The board has drawn up a set of rules governing the work of janitors, which have been posted in conspicuous places in the school buildings. The rules are as follows:

1. Janitors shall reside within a reasonable distance from the building under their charge in order that they may at all times have a general oversight of the building and grounds.
2. All cleaning shall be done at such times as will not interfere with the regular work of the teachers.
3. They shall perform work, if requested to do so, at other school buildings than the ones at which they are regularly employed.
4. Classrooms, cloakrooms and corridors shall be swept thoroughly every day, after school has been dismissed.
5. Janitors are requested to be at their respective schools at 7 o'clock in the morning and must leave by 5 o'clock in the evening.
6. Buildings must be scrubbed at least once a month, and more frequently if necessary.
7. Janitors are required to remain on duty at their buildings during the hours prescribed, and may not leave for lunch.
8. The United States flag must be raised at 8:30 o'clock each morning and lowered at 4:00 p. m., except in case of rain.
9. Janitors are required to return all worn-out tools to the storeroom.
10. All furniture, window sills and balustrades must be dusted each morning.

Complaints against the rules are being registered freely by the janitors. One fault which is found is against the hours required. The men say that it is impossible to complete the amount of work required after the dismissal of school. School closes at 3:30 and the teachers leave at four, leaving only one hour for cleaning. In the case of large schools and a small force of help the task is rendered almost impossible.

#### Rules for Meetings.

Jersey City, N. J. The board of education has passed the following rules governing the conduct of political meetings in school buildings:

1. Doors will be open at 7 p. m. The public is requested to assist the police by keeping the lines so as to avoid confusion.
2. The general admission will be through the front doors only.
3. Smoking will not be permitted in or around the school building or on the grounds at any time.
4. Tickets to the stage and balcony will be good through the Palisade Avenue entrance only. Tickets must be shown at the entrance to the grounds and surrendered on entering the building.
5. Those occupying stage or balcony seats must leave the building from the side doors only. This will prevent the crowd from the balcony meeting a similar crowd leaving the auditorium.
6. No children will be admitted either to the hall or to the grounds, whether accompanied by parents or not.
7. After 8 p. m. balcony seats not taken will be open to those not then seated.

#### Secret Societies.

Grand Rapids, Mich. A set of rules has been adopted to govern secret societies in the high school. The rules are as follows:

All high-school organizations, comprised wholly or in part of students, which shall in any manner be connected with the Grand Rapids high schools, shall be under the control and

direction of an advisory board. The advisory board shall consist of two or more members of the high-school faculty and an equal representative number from the students' organization. The principal or his assistant shall act as ex-officio member.

The duties of the advisory board shall be to investigate all matters of general policy relating to the organization, to supervise the work of the society and to guide the members in developing higher standards of social efficiency.

No pupil shall be a member of more than one organization at the same time.

Pupils who have not covered fourteen hours' work during the past semester, or who are not carrying satisfactorily fourteen hours of class work during the present term, shall not hold office nor become eligible for an office.

Not more than one office at any time shall be held by any student, nor shall anyone serve in more than one executive capacity at any one time, without the consent of the principal of the school.

#### Fire Drills.

The Chicago board of education has recently drawn up a set of fire-drill rules for the guidance of principals and teachers. The rules are comprehensive and should prove suggestive:

Emergency and Fire Drill Dismissals. There shall be adopted in every school and branch a regular formation of the pupils in every part of the building, including gymnasium, kindergarten, cooking and sewing rooms, manual training shops, etc., which shall be used at every emergency or fire drill dismissal. Teachers shall be responsible for the pupils in their care and shall leave the building with them. Pupils shall not carry flags and shall not link arms or clasp hands.

Signals. The fire gong shall be used only for emergency or fire drill dismissals. In every school the following set of signals shall be used for fire drill dismissals with sufficient variation to accustom all pupils to the use of each exit:

- (1) Three (3) strokes on the fire gong; which



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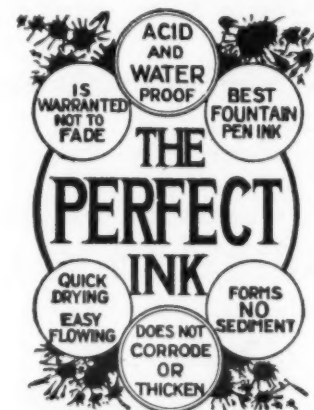
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shall mean a fire drill dismissal with all exits open.

(2) Three (3) strokes on the gong followed by one (1) stroke; a fire drill dismissal with one exit (to be designated) closed.

(3) Three strokes on the gong followed by two (2) strokes; fire drill dismissal with a second exit (to be designated) closed.

The signal code may be extended according to the number of exits. Cards on which is shown the system of signals shall be continuously posted in each schoolroom and at each gong pull.

Frequency. The drill in every school shall occur at least twice within each school month without previous notice, and at different hours from those of the regular dismissals and recesses.

Inclement Weather. Fire drills in the public schools shall not be practiced on days when exposure to the weather would injure the health of the children.

Report of Drills. Report must be made to the superintendent of schools at the end of each school month on the form provided for that purpose for each school and a separate report for each branch. These reports should be sent not later than the first mailing day after the close of the school month. Each report should be made in duplicate, and a copy should be retained by the principal.

### MISCELLANEOUS RULES.

Minneapolis, Minn. The board of education has made a change in its rules governing the use of school buildings for social center purposes. Attention was called to the fact that per-

sons signing the guaranty for the use of buildings were made responsible for losses in case of fire. There was no intention at the time of the formulation of the rules to make anyone liable for fire losses and the new rules remove the clause from the guaranty.

The Philadelphia board of education has recently passed rules governing the promotion of high school students. The rules are as follows:

High school students who, during any part of the school course, other than the final one, shall be conditioned in work requiring more than five hours a week, must remove the causes for failure by additional work not included in the regular five hours' class work. The same must be cancelled before the opening of the next school term or the work of the past year must be repeated.

Pupils promoted with a condition in work requiring less than five hours' work a week may be promoted under the provisions of the foregoing limitation and may cancel the condition by an examination previous to the opening of the next school term; they may also remove the condition by continuous good work in class during the second year; or by a vote of two-thirds of the committee of the school upon a recommendation of a majority of the teachers. The recommendation must also be approved by the president or principal of the school, otherwise they must repeat the past year's work.

Lawrence, Mass. The board of education has ruled that graduates of parochial schools, upon presentation of a certificate from the supervisor

of the diocesan schools, shall be admitted to the high school without an examination.

Beaumont, Tex. The school board has passed a resolution providing that members of graduating classes shall wear caps and gowns of uniform color and material, to cost not more than \$10. The board also prohibited the presentation of flowers and presents during the exercises.

Toledo, O. The board has permitted the opening of the school buildings for public entertainments. To insure the board against damage of buildings, each organization requesting the use of the same must present a petition signed by twenty-five persons. A fee of \$3, to cover the cost of heating and lighting, must accompany the petition.

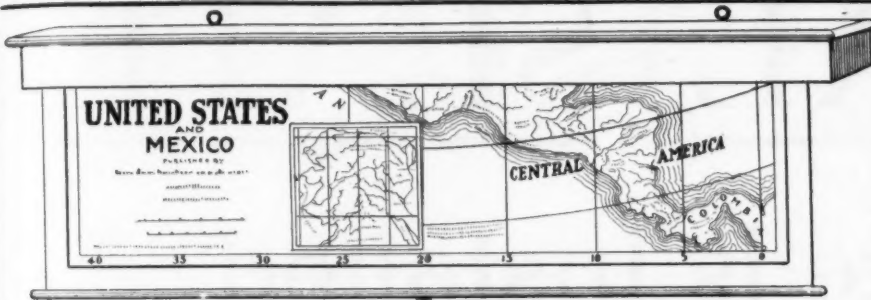
Roselle, N. J. The school board has adopted a rule that teachers absent from duty shall make a written excuse to the principal, which will later be turned over to the board. In case of illness or death in the family the teacher will receive pay for the time lost, but under no other conditions shall a teacher be compensated.

Mansfield, O. A recent resolution of the school board prohibits the use of cigarettes by students and employees while in the school buildings or on the school premises. Smokers will not be permitted to enter or graduate from the high school and offenders against the rule will be disciplined.

Teachers will not be employed in the public schools of Logansport, Ind., unless they are twenty-one years of age, under a ruling of the board of school trustees. Girls graduating from the local schools have been in the habit of working to obtain positions as teachers immediately



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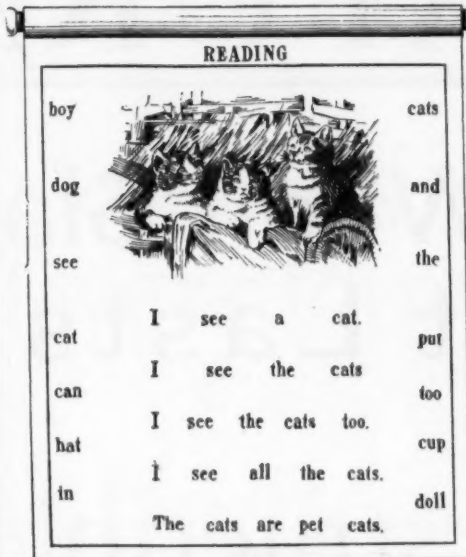
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after their graduation without having had previous experience. The ruling will materially affect such graduates. It will be observed in the choice of teachers to fill out the vacancies for the coming school year.

A rule forbidding the smoking of pipes or tobacco within three blocks of the Bayonne, N. J., schools, has been promulgated. The rule is the result of complaints that many of the youths lighted pipes and cigarettes as soon as they left the building.

Elgin, Ill. The school board has ruled that all high school entertainments begin at eight o'clock and close promptly at ten.

Detroit, Mich. The school board has prohibited the selling of "blue star" tags for the tuberculosis fund in the school buildings. The ruling is the result of a school board regulation against the collection of funds from school children for any purpose.

Chicago, Ill. A rule has recently been passed by the board of education requiring the "absolute" resignation of high school students from secret societies. The board has decided that mere separation during school attendance is not sufficient.

Albion, Mich. The board of education has drawn up a rule for the exclusion of frats in the high school. Recently students belonging to these societies were ordered to sever their connection with the same and furnish affidavit to that effect. Unsatisfactory replies were made and the board decided to make the regulations more stringent.

Salt Lake City, Utah. A resolution has recently been passed by the state board of education granting state high school diplomas to teachers of twenty years' experience, fifteen of which have been in a high school. Application for such diploma must be accompanied by sufficient evidence that the service has been rendered.

Former members of fraternities and sororities in the New Castle, Ind., high school have been

forbidden to participate in any activities of their orders during the summer vacation season. All students entering the school next fall will be required to sign a statement to the effect that they have complied with these rules before they will be enrolled.

Wichita, Kans. The board has ruled that no married women shall be employed as teachers in the public schools who have husbands capable of supporting them. The board has made an exception in the case of domestic science and domestic art teachers. Individual cases will be decided as they arise.

A committee of the Chicago board of education has reaffirmed a rule which prohibits the use of classrooms for private, paid tutoring. An instructor asked the use of a laboratory for coaching students who had failed in an examination. In the opinion of Superintendent Ella F. Young no teacher should receive pay for tutoring a class which he has been unable to teach sufficiently well to enable the members to pass.

Westmoreland, Kans. A rule has been adopted providing that graduates shall hereafter appear in caps and gowns approved by the board. The present class adopted the college cap and gown.

Bradford, Pa. The board of school directors has passed a rule reserving the playgrounds for the exclusive use of school children.

Fort Dodge. Secret societies have been prohibited in the high school.

Nashville, Tenn. State High School Inspector P. L. Harned has recently mailed circulars to high schools containing requirements of the state board of education. The rules read:

High schools of the first class must have at least four teachers, licensed under the regulations of the state board of education, whose time must be given to high-school branches. The school must offer all work outlined for one or more four-year courses and must possess sufficient laboratory equipment to teach all the sciences of the course or courses adopted. Recita-

tion periods must be at least forty minutes long. Courses in agriculture and home economics must be given by trained teachers.

Second class high schools must employ at least three teachers.

Third class high school teachers to be licensed under the direction of the state board of education. The course outlined must be taught in full.

Boise, Ida. The school board has expressed its disapproval of secret societies in high schools. In the discussion, several objections to their existence were mentioned, namely, that they are undemocratic, that they interfere with school work and attempt to dominate the student body, and that they maintain a select organization, thereby causing cliques and dividing the students. A resolution was passed to the effect that the legislature be asked to pass a law prohibiting secret organizations and barring members of such societies from school exercises of all kinds.

Hillsboro, Ill. The school board has recently passed a resolution to the effect that all grade teachers who have not graduated from a normal school or college shall attend summer classes at the Idaho State Normal School, provided they have not attended within three years.

Saginaw, Mich. The school board has ruled that the Friday following a Thursday on which a holiday occurs shall be eliminated as a holiday except where the same follows Thanksgiving day.

Massillon, O. The board of education has passed a rule barring the admittance or graduation of pupils addicted to cigarette smoking. The matter was brought to the attention of the board by a report that boys of the lower grades were imitating the high-school students.

Lynn, Mass. Evening schools will hold three sessions each week instead of four, as formerly. Supt. Frank J. Peaslee says that the change is necessary for lessening the burden on the teachers, nearly all of whom teach during the day.



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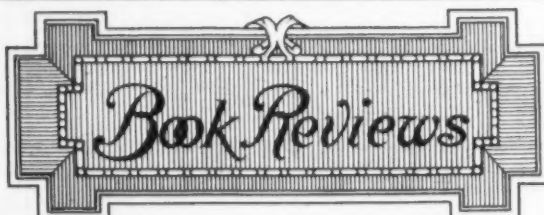
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### Child's First Book for Home and School.

By Florence Bass. 128 pages. Price, \$0.30. D. C. Heath & Co., Boston, Chicago.

It is pleasant to note that the home is remembered in the title. Children have learned to read well before ever putting foot inside a schoolroom. The illustrations in colors and black and white are attractive. Those of objects are to be drawn, painted, cut, or modeled by the children. As is fitting in a reader of this grade, by far the greater part of the words are object and action words. In homes or in schools, the reader will be helpful.

### The Fall of the Year.

By Dallas Lore Sharp. 126 pages. The Houghton Mifflin Co., Boston, New York, Chicago.

A delightful book of thirteen chapters. Three tell those who would come most fully into the spirit of autumn, "things to do, to see, to hear" this fall. Obedience will bring a new and finer acquaintance with the sights, bounds, scents, of this divinely beautiful world. The other chapters describe the author's personal out-of-door experiences. These are not labelled personal in a dry-as-dust fashion; but the facts have been vitalized by thought and motion, while a whimsical way of pulling more than one situation discloses a keen scene of fun. The seeing eye always finds something worth seeing.

### Primary Manual Work.

By Mary F. Ledyard and Bertha H. Breckenfeld. 121 pages. Price, \$1.20. Milton Bradley Co., Springfield, Mass.

Oh! to be a little child under a competent and sympathetic teacher, learning to make the things outlined in this book. Accuracy of eye, dexterity of hand, power of forming mental pictures should be some of the results gained. In the effort to secure unity and flexibility the work has been grouped about literature, history, nature

topics. The changing seasons, special days, the stories of Hiawatha, Docas, the Pilgrim Fathers are only examples of the material on which this primary manual work has been based. Three 30-minutes per week are to be given to gaining skill in successful doing.

### Civil Service Letters.

By Jerome B. Howard. 56 pages. Price, \$0.25. The Phonographic Institute Co., Cincinnati, O.

This little volume contains a collection of characteristic official communications such as might be sent out from the government departments in Washington. The letters are reproduced in the amanuensis style of phonography and are designed to be of assistance to shorthand writers and students of phonography who are preparing themselves for the government service and wish to fit themselves to pass civil service examinations as stenographers. The letters are all genuine specimens of the kind of correspondence which emanates from the various departments of the federal government and are printed first in Benn Pitman shorthand and then in facsimile type-writing. They thus furnish models both for the shorthand writer's notes and for correct style of transcription on the writing machine. The booklet has been produced in the usual careful style of the Phonographic Institute.

### New Cushing's Manual.

Of Parliamentary Law. Revised by Chas. R. Gaines. Cloth, 263 pages. Thompson, Brown Co., New York.

Cushing's Manual has since its first publication in 1844 been a standard authority for American parliamentary practice and is today, in its original form, still looked upon as indispensable. Naturally much of it has become antiquated as custom and common practice have changed.

The present revision is authorized by the representatives of Mr. Cushing and has been undertaken by the original publishers. The reviser has shown unusual fitness for the work by reason of twenty years' experience as a teacher and student of parliamentary procedure. He has, we think, admirably preserved the spirit of the original work and has completed a manual that will assist in facilitating deliberate action, rather than obstruct business. The book is divided into two parts of which the first is a concise and clear view of parliamentary law, of today, following

in the main the original work. Part two is a "working code" with a statement of rules and practices adapted to ordinary societies and intended for adoption by them as a part of their standing rules. A supplement gives a model constitution and by-laws for a debating club, model minutes and forms for a question for debate and form of roll. The appendix is so general and suggestive that its forms will serve as the basis for any organization.

In general, the book excels the common manuals in completeness, in simplicity of language and in orderly arrangement. The work of revision is admirably done and the new edition will put Cushing's manual again at the top of parliamentary guides. It might well be included among the "desk reference books" of every school board chairman.

### Der Schwiegersohn.

By Rudolph Baumbach. Edited by Edward Manley. Cloth, 224 pages; 50 cents. Scott, Foresman & Co., Chicago, New York.

This book contains three little modern classics which illustrate respectively the German love for romantic fairy tales and the peculiar genial humor of German folk stories. They are entertaining in content, simple and easy in style and rich in everyday idiomatic German. The notes are brief and the vocabulary is complete. Exercises in both oral and written work are appended.

### Story-Land.

By Effie Seacrest. 91 pages. The A. S. Barnes Co., New York.

In teaching oral and written composition, pictures have long been a favorite device for arousing interest and holding the attention of children. In the hands of a resourceful teacher, they are a potent aid in arousing thought, for strengthening the imagination and for developing powers of expression. The present book contains thirty-two pictures with explanatory text and an introduction consisting of an explanation of the method of use. The pictures are mostly reproductions of famous modern paintings and tell a story of interest to children. Such familiar pictures as Millet's Gleaners, Rosa Bonheur's Horse Fair, Renouf's Helping Hand, Defregger's First Steps in Reading are included. The book has been developed in actual classroom use and has been em-



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played, in manuscript form, in several New York elementary schools with notable success.

#### Pope's The Iliad of Homer.

Edited by Charles E. Rhodes, Buffalo, N. Y. 641 pages. Price, \$0.25. The Macmillan Co., New York, Chicago.

An outline of Greek mythology, the plot of the Iliad, a critical estimate of Pope, as a poet and a translator, are the main points of the introduction. At the beginning of each of the twenty-four books in this great epic is the argument, virtually an abstract of the book. The notes and questions are exceptionally brief, also exceptionally pointed. May not this coincidence be one of cause and effect? The industrial phrase, "by-products," has been aptly applied to a list of topics under which to gather from the poem fragments of incidental information concerning Greek life and customs. A bibliography and a glossary complete the editorial aids to a translation termed by Johnson "a poetical wonder, a performance which no age or nation can pretend to equal."

#### Selected Poems.

Edited by Henry W. Boynton. 342 pages. Price, \$0.25, net. The Macmillan Co., New York, Chicago.

What are these seven poems, selected for required reading in secondary schools? The strange, sad, melancholy strains of "The Ancient Mariner" and "The Raven," Lowell's "Vision of Sir Launfal," beloved by thousands of young American readers; "Sohrab and Rustum," lofty and restrained; "Lays of Ancient Rome," a reconstruction of early Roman ballads; "The Courtship of Miles Standish," written in the metre of Homer and Virgil; "Snowbound," a winter idyl of New England.

The sources of these poems, the circumstances under which they were written, are emphasized in the introduction. The notes are not so full as to be discouraging, but are enough to be sufficient.

#### Class Teaching and Management.

By William E. Chancellor. 329 pages, illustrated. Harper & Bros., New York.

The contents of this book are one result of systematic courses of lectures given in different

universities and occasional lectures given elsewhere. But these lectures must have been preceded by careful observation, serious reflection, critical comparison, and—it is to be hoped—just conclusions. This foundation work is shown by the chapter topics, by the points selected as main points, by the handling of each point in an all-round fashion. This minuteness of detail is not wearisome, but it is here highly educational. Subject, treatment, style make this book valuable for classes or for individuals.

#### Gardens and Their Meaning.

By Dora Williams, Boston Normal School. Svo. cloth, 235 pages. Price, \$1.00. Ginn & Co., Boston, Chicago.

Scientific but distinctly readable text, beautiful illustrations, tables conveniently arranged for ready reference, make a practical handbook for those teaching gardening to young people. It gives instruction in fullest detail how to select and lay out the ground, how to prepare the soil, what to plant, and how to plant it. The book thus goes on to show gardens not only provide occupation for children, not only arouse a love for country life, not only train in elementary agriculture, but may become a field in which responsibility, co-operation, initiative and leadership may be developed. Large results from small gardens.

#### Kittens and Cats.

By Eulalie Osgood Grover. 84 pages. Price, \$0.40. Houghton Mifflin Co., Boston.

Young living creatures delight children. Why not? Are they not all young together? So children will certainly take to these short stories about the "Queen of the Kitten Country," and the party she gave in her palace. They will fairly revel in the pictures of the cats and kittens, no two dressed alike. Stories and pictures must help little folk to read understandingly and expressively—an end always desired in primary work.

Thick paper, clear type, pictures enclosed in bright decorative frames make a dainty book. Educational Needlecraft.

By Margaret Swanson and Ann Macbeth, Glasgow School of Art. 136 pages. Price, \$1.35, net. Longmans, Green & Co., New York.

Physiology, psychology, art have guided this

laudable attempt. The child with her long sight and undeveloped hand should use bright colors and long stitches. As the development of the hand takes place between eleven and thirteen she may now begin to shape, measure, cut out garments. Expensive material is not needed. Inexpensive, but durable, fast-dyed stuffs are much better. Variations in cut, good combinations in color, decorative stitching will create articles of use and beauty from common material. This is art in its highest sense. The work in cutting is scientifically graduated. Directions, verbal and graphic, are minute and clear. The varied stitches are most interesting.

All tends to give women larger and more useful lives.

#### Leading Facts of English History.

By David H. Montgomery. Cloth, 444 pages; price, \$1.20. Ginn & Co., Boston, Chicago.

This revised edition has many fine, strong points. New maps, twenty-five new illustrations, new type are some of the external changes. The revised and partly rewritten text lays stress upon England's growth in literature and industries. It also emphasizes the growth and development of cabinet government; the political policy of the more important prime ministers has been concisely outlined. General summaries, timely footnotes enlarge and give point to the text of each chapter. A general summary of English constitutional history, constitutional documents, a classified list of reference books offer material for advanced work.

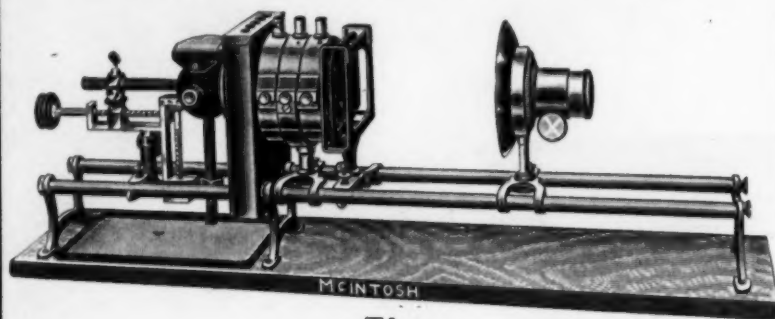
#### Heroes of Everyday Life.

By Fanny E. Coe, Boston Normal School. Cloth, 169 pages; price, \$0.40. Ginn & Co., Boston, Chicago.

The incidents chosen for this book are true. They nearly all deal with American life and are fine examples of civic courage. The heart beats faster, the breath comes quicker, as one reads of the brave deeds of firemen, engineers, drivers, miners, telegraph operators, and day laborers. These men did their brave deeds while pursuing their everyday calling. They often met the strain alone, without the stimulus of numbers. But when a great danger came they met it as a part of the day's work. Such reading raises hearts and ideals to higher levels.



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**About's Trente Et Quarante.**

Edited by T. H. Bertenshaw, City of London School. Cloth, 126 pages; price, \$0.35. Longmans, Green & Co., New York.

Finish, wit, proportion mark this story by Edmond About, which is full of amusing situations. It is worthy of mention that a special arrangement of the type serves as a guide to pronunciation. A vocabulary, notes, and exercises complete the editorial aids. In the exercises, certain lines in each chapter are to be learned by heart; then words, phrases, sentences based upon the text in the chapter are to be translated into French. In the recapitulatory exercises an abstract of each chapter is to be translated into French. Practice is thus given in the use of idioms and conversational expressions.

**The Dutch Twins.**

By Lucy Fitch Perkins. Cloth, 190 pages; price, \$0.50. Houghton Mifflin Co., Boston.

Kit and Kat—short for Christopher and Katrina—are the Dutch twins. The story of some of their duties and pleasures, from one morning in early summer till Christmas, opens a door into the life of a homely, clean, comfortable, middle-class Dutch family. As this family life touches national customs, readers may little by little form a correct idea of life in unique Holland.

The illustrations are delightful. In these days of scant attire, Kit and Kat, in wooden shoes, snug headgear, ample, even bulging clothes, seem almost overdressed. But their dimpled hands, infant faces, dramatic gestures are genuinely childlike.

**Cut Book Cost.**

The price of twenty-three books used in the public schools of California has been reduced by the state board of education at its June meeting. The cut in prices has been made at the recommendation of the state printer, who reported savings in the cost of manufacture of textbooks ranging from twelve to forty per cent and averaging a fraction less than twenty-five per cent. The annual cost of books to pupils is approximately \$200,000 and the reduction will mean a saving of \$30,000 to \$50,000.

The cost of a complete set of state texts, in-

cluding the six readers, two spellers, two histories, two arithmetics, five writing books, two geographies, a civics and a primer of hygiene, has been \$8.11. This is now reduced by \$1.32 to \$7.39. The largest cuts are made in the fourth and fifth readers, which are reduced from fifty to thirty-eight cents and in the advanced arithmetic, which drops from fifty cents to thirty-seven cents. The writing books have the greatest percentage of reduction coming down from eight cents to seven cents each.

The average reduction in the cost of books to the school patrons is fifteen per cent. The discrepancy between this and the one-quarter cut in manufacture is explained by the fixed charges of postage and authors' royalties which cannot be changed. It is stated, however, that the limit of reducing the cost of textbooks in California has not been reached; in fact, further economies in the state print shop and closer buying will make still greater savings to the school children.

**TEXTBOOK NEWS.**

Conn's physiologies have been adopted this year in forty counties of Iowa which have selected textbooks for uniform use. A year ago the same book secured the adoption in twenty-six counties in the state of Iowa out of twenty-eight which selected books.

Four counties in the state of Illinois have recently come under the county uniformity plan of adopting textbooks. They include McLean, Livingston, Peoria and Fulton counties. Two further counties, Adams and St. Clair, containing the cities of Quincy and East St. Louis, will probably adopt uniform textbooks during the present summer.

All of the counties in South Dakota adopted a uniform series of textbooks for a period of five years last month. The date set for in the official publication was June 11. There was much activity on the part of the publishers and practically all houses had representatives on the ground.

The cities of Hartford, Conn., and Waterbury, Conn., have recently adopted Hawkes, Luby & Touton's first and second courses in algebra (Ginn) and Hawkes' advanced algebra (Ginn).

**Current Educational Activities**

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Salt Lake City and Ogden, Utah, have lately readopted the New Educational Music Book (Ginn). Ogden, Utah, has introduced for the seventh grade, Atkinson's European Beginnings of American History (Ginn). Salt Lake City has adopted Slaughter & Lennes' algebra (Allyn) and Wells' algebra (Ginn), and Bellum's First Latin books (Foresman), on the "flexible" as opposed to the "closed" list plan. Ogden, Utah, has adopted Potter's First Latin Book (Sanborn) and Hough & Sedgwick's physiology (Ginn).

Among the books lately adopted for the Chicago high schools are: D'Ooge's Latin book (Ginn); Becker & Rhodes' German (Foresman); Bergen & Caldwell's botany (Ginn) and Brigham's commercial geography (Ginn); Belding's Commercial Correspondence (American); Muzey's American history (Ginn); Ashley's American history (Macmillan); James & Sanford's American history (Scribner); Baldwin's rhetoric (Longmans); Woolley's composition (Heath) and Hanson's composition (Ginn).

Worcester and Fall River, Mass., have within a few weeks, adopted the Wentworth-Smith arithmetics (Ginn).

Fourteen counties in Missouri have lately adopted Reed & Kellogg's grammar (Merrill).

Lancaster, Pa. The school board has adopted for use in the grades: Sumner's readers (Beattys); Hamilton's arithmetic (American); Gulick's hygiene series (Ginn); New World speller (World); Arnold's With Pencil and Pen (Ginn).

The Kansas State Teachers' Reading Circle has recently selected Johnson's Education by Play and Games (Ginn) and Van Dyke's Essays in Application.

"Journalism for Teachers" is the title of a suggestive pamphlet issued by the University of Missouri. Only men who have received "school notes" copy for use in the daily or weekly press can appreciate the wishy-washy, pointless stuff written by teachers, principals and even superintendents. The present booklet goes into detail as to the subject-matter and the form of school news. It deserves wide circulation and careful reading.



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Easton, Pa.	Hackensack, N. J.	Phillipsburg, N. J.	Kearney, N. J.
Annapolis, Md.	Irvington, N. J.	Hoboken, N. J.	Royersford, Pa.
Lansford, Pa.	Spring City, Pa.	Lehigh, Pa.	E. Petersburg, Pa.
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Princeton, N. J.	Rutherford, N. J.	Rockaway, N. J.	Erie, Pa.
St. Clair, Pa.	Williamsport, Pa.	North Troy, N. Y.	Lansford, Pa.
Slatington, Pa.	Ambler, Pa.	Souderton, Pa.	Albany, N. Y.
South Amboy, N. J.	Avondale, Pa.	South Orange, N. J.	Asbury Park, N. J.
Tamaqua, Pa.	Bayonne, N. J.	Telford, Pa.	Belmar, N. J.
West Chester, Pa.	Newark, N. J.	Weehawken, N. J.	Sharpsburg, Pa.
West New York, N. J.	Reading, Pa.	West Pittston, Pa.	Clifton, N. J.

## COLLEGES AND NORMAL SCHOOLS

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Williamson Free Trades School.	State Normal School, Frostburg, Md.
State Normal School, Millersville, Pa.	Public Library, Hanover, Pa.
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## ENDORSE INDUSTRIAL EDUCATION.

The National Association of Manufacturers, at its annual convention in New York City, May 21st, discussed very thoroughly the subject of industrial education. Mr. H. E. Miles, president of the Wisconsin state board of industrial education, acted as chairman of a special committee on the subject and introduced resolutions defining the attitude of the manufacturers toward agricultural and technical instruction.

Mr. Miles in his address presenting the resolutions made a very complete statement of present industrial and educational conditions upon which he based the necessity for more attention to vocational training. This statement is of interest to school people in that it reflects the views and observations of the most important industrial organization of the United States. Mr. Miles said in part: "One-half of the children in the common schools of the United States leave school by the end of the sixth grade, with no substantial educational acquirements beyond reading, writing and arithmetic in their simpler forms, the essential of education and citizenship, coming if at all, after the sixth grade."

"This half of the children soon forget much of what they learned in their brief school experience."

"Truancy and absence are so prevalent that less than three-fourths of the children are in school as much as three-fourths of the time, the enrollment being 17,000,000, and the average attendance being under 12,000,000, 1,600,000 being permanently absent from, and unacquainted with school life."

"Illiteracy in the United States is fifty times that of several continental countries and is four times greater among the children of native whites than among the native born children of immigrants."

"In many schools and many cities educators are finding great cultural and educational value in the development of the motor activities, the practical and creative desires of the youth, in highly developed practical and extended courses in manual and pre-vocational training, and such courses are developing in an unexpected degree, an appreciation of the dignity of labor of all kinds, and such moral qualities as diligence, concentration, perseverance and respect, and causing many to successfully continue in school who

otherwise would leave discouraged, early in the course."

"A majority of the children who leave school prematurely, do so from no economic need, and in fact are idle about half the time between their 14th and 16th years, being the first two years out of school, and average for the first two years little over \$2.00 per week in earnings, leaving school principally because their interest in practical and creative effort is not provided for."

"The loss to the schools of 50 per cent of the children in the middle of the elementary school courses is an incalculable waste of the human resources of the nation, these human resources being estimated by Professor Fisher as of the economic value of \$250,000,000,000, and five times the value of all our other natural resources combined."

## Resolutions Adopted.

The resolutions adopted by the organization led the members of the organization to propose the following principles of educational betterment:

(1) Continuation schools for that half of the children who leave school at fourteen years of age, and mostly in the fifth and sixth grades, these continuation schools to be liberally cultural and at the same time to be extremely practical and related as directly as possible to the occupations in which the several students are engaged.

(2) The development of a modern apprenticeship system wherein by contract the respective and equal rights of employer and employee are fully recognized, and the entire trade is taught, together with such other subjects as are essential to good citizenship.

(3) The development of secondary Continuation or Trade Schools, by which the more efficient of the great army of boys and girls who will enter the continuation schools may progress from these lower continuation schools, as in some other countries, to the foremost places in industry and commerce.

(4) Compulsory education through adolescence being until the 17th or 18th year, attendance being in the all-day school until the 14th year, and thereafter in either the all-day schools or in the continuation schools for not less than one-half day per week, without loss of wages for hours in school.

(5) The strengthening of all truancy laws and the development of public sentiment in support thereof.

(6) The training of teachers in thorough-going methods of industrial practice, including as part of such training extended experience in actual shop work.

(7) The establishment of independent state and local boards of industrial education consisting of one-third each, professional educators, employers and employees, thereby insuring, as in the more successful European countries, the proper correlation of the schools and the industries.

(8) The development of the vocational and creative desires of the concrete—or hand-minded children now in the grades, discouraged, anxious to quit, and often called backward, only because the education now tendered them is abstract and misfit.

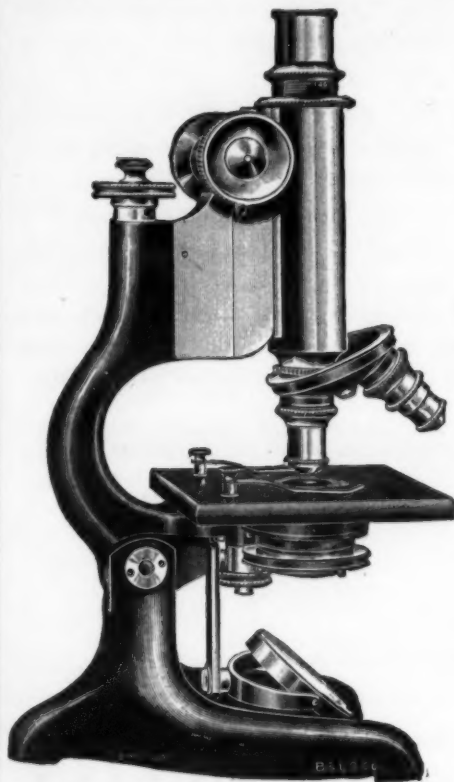
(9) The establishment of shop schools and part-time schools wherever practicable.

(10) The establishment of departments or centers of vocational guidance so that the great majority of the children who now enter industry at fourteen with no direction, 85 per cent falling into the "blind alley" occupations, may, with the reversal of these figures, as in some other countries, enter under advice, intelligently and properly into the progressive and improving occupations.

The city of St. Louis has been denied the right of interfering with the installation of the plumbing system in the Horace Mann school, even though it does not conform with the building ordinances. The decision is of interest in that it establishes the independence of the St. Louis board of education, at least in the erection of buildings. The suit was brought to prevent the plumbing inspector from compelling the contractors at the school to install an individual venting system in place of a continuous system which the board specified. In the arguments before the local district court, the attorney for the board contended that the schools are state and not local institutions, and buildings erected under the supervision of the board of education could not come under the city plumbing and building ordinances. The court upheld this view.



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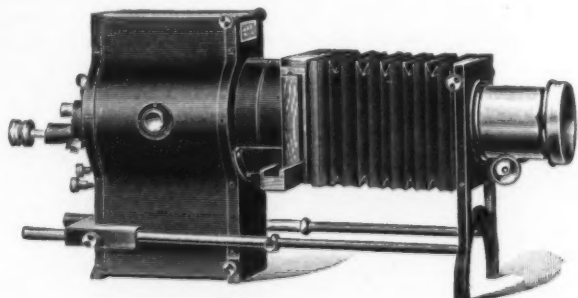
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#### C. F. CARROLL DIES.

Clarence F. Carroll, superintendent of schools at Marblehead, Mass., and lately superintendent at Rochester, N. Y., died suddenly in Warner, N. H., on June 13. Mr. Carroll went to Warner to address the graduating class of the Simonds Free high school and shortly after the exercises was taken ill with an attack of acute indigestion. Cerebral hemorrhage followed and he lived but an hour. He was apparently in the best of health when he began his address.

Mr. Carroll was born in Grafton, Mass., in 1851 and was graduated from Yale in the class of 1871. He was for many years engaged in normal school work in Pennsylvania, New Jersey and Connecticut. In 1902 he became superintendent of the Rochester public schools, where he remained until 1911. After resigning he took up residence at Boscawen, Mass., and spent several days each week in Marblehead, supervising the schools of the town. He is survived by a wife, two sons and a daughter.

Mr. Carroll was widely known as an educator and took an active part in the deliberations of educational bodies, particularly the National Education Association. He was the author of the Carroll "Wide World" geographic readers, and co-author of the well known Carroll & Brooks' readers.

#### BUSY SUPERINTENDENTS.

State Superintendent Edward Hyatt of California issued recently a bulletin warning boards of education against placing too much emphasis upon final examinations for pupils. He writes:

"In preparing examinations, boards of education often find it easy to lose sight of childhood as it is in the mental picture of childhood as it ought to be. Children are weak, stumbling, irregular, illogical, uncertain, careless. They will make every blunder and every mistake that is possible, and then throw in a few for good measure. We cannot really test them by examination questions.

"Let us go easily with wise tolerance and liberal allowance for the frailty of human nature. Let us not scare the youngsters or keep them late hours or give them difficult and technical questions, or put them in embarrassing positions."

Governor Deneen of Illinois has restored to citizenship Newton C. Dougherty, who was sentenced to the penitentiary for appropriating the school funds of Peoria while superintendent and treasurer of the school board of Peoria.

A change from a three year course to one of four years in the high schools of New Orleans has been suggested by Superintendent J. M. Gwinn and at its last meeting the school board directed that the committee on secondary schools and the superintendent confer and report on the matter. The recommendation was also made that promotions in the Normal school be made annually instead of semi-annually, on account of the increased attendance in the Normal school being declared to be sufficient to meet coming demands for teachers.

The committee on rules of the school board was also directed to consider the recommendation of Superintendent Gwinn that the rules be changed so as to permit men to be appointed to be principals of schools. Superintendent Gwinn declared that with the rules as now formulated it is practically impossible for men to be appointed as principals of grammar schools and that preparation for society could be best served with having men and women teachers. There are now no male teachers in the grammar schools of New Orleans.

School improvement leagues in the rural communities of Tennessee have been formed and the awakening of parents and pupils to the need and the advantages of improved school grounds is constantly agitated.

The various counties throughout the state are watching, with interest, the recent action of the Bradley county board of education in electing Miss Melissa Byrd as county collaborator at a monthly salary. Her work will consist of visiting rural school districts; co-operating with the school leagues in devising means of improving rural school property; visiting the homes of pupils, inducing absentees to return and take an active part in all school work, and in general, striving to create a lively interest in the betterment of rural school conditions.

County Superintendent S. Y. Adcock has contributed a large part of his time to the work and was instrumental in launching the present innovation.

Waltham, Mass. Supt. W. D. Parkinson has recommended paper towels as the most satisfactory substitute for common towels in the schools. The latter are prohibited by law.

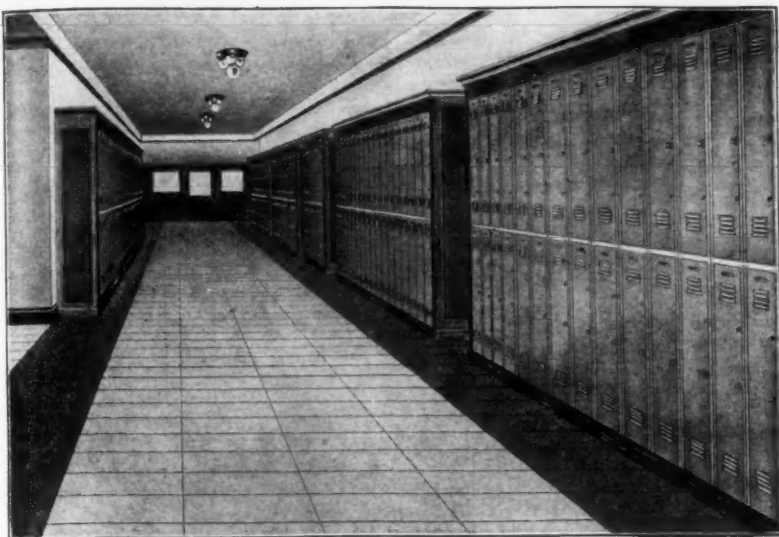
Troy, N. Y. The school board has decided to conduct an open air school next fall.

Supt. J. F. Hughes of Chanute, Kans., has recommended to the board the introduction of moving-picture machines and phonographs for use in connection with the regular school studies.

The board of education of Louisville, Ky., has voted one week's vacation with pay to all janitors, engineers and matrons employed in the schools. The board in passing the order established a precedent altogether at variance with the former practice of requiring employes to work during the whole vacation period.



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Temple, Texas H. S.	Monmouth, Ill., H. S.	State Normal School, Carbondale, Ill.
Waukegan, Ill., H. S.	Dallas, Texas, H. S.	Univ. of Calif., Berkeley, Calif.
Bayer, Minn., H. S.	Broadway H. S., Seattle, Wash.	Lincoln H. S., Portland
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CHICAGO, ILL.

## VACUUM CLEANING.

(Concluded from Page 21)

by a vacuum system and the amount of labor of the janitor will be at least not increased."

Mr. J. F. Roach, superintendent of buildings at Decatur, Ill., makes this comment: "The system, so far, has not allowed us to curtail the janitors' service. In corridor or office work it is quicker; in seated rooms not much, if any, time is saved. We give sanitation credit for a good deal."

Mr. A. L. Clinite, of Des Moines, Ia., says: "We believe, also, that vacuum cleaning is fully worth the money if properly installed."

Mr. Thomas S. Weaver, of Hartford, Conn., writes: "Worth more than the money."

Mr. Samuel G. Jones, business director of the Louisville public schools, writes: "The installations during this short period (six months) I consider have improved the sanitary conditions, also reduced janitors' labor, but the money-saving in the installation and maintenance is now being investigated."

Mr. J. C. Otteson, superintendent of the Milwaukee school buildings, is of the opinion that sanitary conditions are greatly improved and that the money spent for installing the plants is well applied. He declares, however, that the time of sweeping is not materially reduced.

Mr. E. F. Guilbert, of Newark, N. J., writes: "On my recommendation they (vacuum cleaners) have been installed in school buildings I have designed in other cities, and I have yet to hear of an objection, except from an occasional janitor who has not learned to handle them properly. They certainly have much to do with the general health of the school, although I do not know of statistics that have yet been compiled that will substantiate this statement." Mr.

George W. Knight, engineer of the Newark board of education, says that "there is no reduction in janitors' labor when cleaning by vacuum system, but rather greater labor and a more thorough cleaning. It is well worth the money."

Mr. E. A. Smith, chief engineer of the St. Louis board of education, writes: "We find that a vacuum cleaning system does not diminish the janitors' labor in any way, however, in view of improved conditions we feel that the money for plants covering installation and maintenance of stationary plants, is well spent."

Mr. J. A. Allen, of Terre Haute, Ind., writes: "There is no question but what vacuum cleaners can be made to improve sanitary conditions. It is not wholly a success, however, under the rule usually adopted of employing one janitor to eight or ten rooms. There is but a short time in the morning and evening when the janitor can get into the schoolroom to clean it. His work must be done as rapidly as possible. The only time they can be used to any advantage in the schoolroom is on Saturdays. It is a mistake to say that the vacuum cleaner reduces the janitors' labor."

Mr. W. N. Ashbaugh, director of the public schools of Youngstown, O., recommends vacuum cleaners on sanitary grounds but, in his judgment, there is not much reduction in labor resulting from them.

## Number of Plants.

While the number of vacuum cleaning plants in operation indicate that a beginning has been made, the table above is not a good index to the number of plants in operation in the United States. Lists compiled by three leading manufacturers indicate that schools have been equipped in more than 250 cities and villages. It is, however, significant that of the cities in

the above tabulation, which have no plants at present, three have piping installed and five are preparing to buy outfits. In the cities operating systems seven propose shortly to equip twenty-two buildings.

The answers to the final question of the letter, "Do you recommend vacuum cleaning for future buildings (or for present old buildings) in your city?" indicates the attitude of school authorities toward vacuum cleaning. With ten exceptions the school officials record themselves in favor of vacuum cleaning. Others who declare themselves to be opposed, qualify their position by such statements as "No, unless saving can be shown," etc.

## General Conclusions.

A thorough study of the answers received from the questionnaire and careful inquiries concerning some of the vacuum systems complained of warrants two conclusions.

First, vacuum cleaning is a distinct acquisition to schoolhouse sanitation, demanded by modern standards, and is for this alone worthy of general introduction.

Second, tools and vacuum producing machinery must be built especially for schools and janitors must be carefully instructed in their use, if the time- and labor-saving possibilities of the systems are to be realized.

Concerning the sanitary advantages of vacuum cleaning, there is room for but little argument. It need only be repeated that school hygienists have for many years found that the dust of the classroom is one of the most prolific causes of the spread of germ diseases. Annually, after the fall opening of schools, contagious diseases increase at an alarming rate, particularly throat, nose and lung troubles. Ventilation of the best mechanical type is ineffective here in removing dust, and heating engi-



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No. 12**

neers agree that the ventilating system cannot be depended upon for cleaning the air of classrooms. Such diseases as pneumonia and tuberculosis find an ideal means of conveyance in the dry air of schoolrooms. And, when it is considered that nearly seventy-five per cent of "epidemic" deaths result from diseases which are "air borne" the importance of adequate cleaning of schoolrooms can be seen.

Vacuum cleaning has demonstrated that, unlike other methods of cleaning, it does not simply stir dust and dirt up and deposit them again in another place, but actually removes them. It does more, in that the vacuum cleaning of floors and walls is really air-scouring, removing from cracks, corners and even pores the carbonic acid gas and other noxious products of respiration which can in no other means be dislodged. In this respect the vacuum cleaner is a better deodorizer than any ozonizers and ventilators, in that it effectively removes the cause of trouble rather than temporarily relieving it.

Inquiry into the cause of the dissatisfaction expressed by some schoolmen with vacuum cleaners shows that, in addition to simple cases of ignorance or unwillingness on the part of janitors to adapt themselves to the new method, unsatisfactory tools are the cause of trouble. Janitors who have been furnished with tools that are too narrow, or fitted with short handles have naturally found it impossible to clean effectively or quickly. On the other hand, from the writer's own observations, long and properly handled tools in the hands of average in-

telligent men, have done wonders, reducing the time of sweeping below the quickest brush method and leaving rooms in spotless condition. At the same time the cost of maintenance and operation has been exceedingly small, in fact, hardly worth considering as against the sanitary advantages afforded.

### WISCONSIN'S NEW INDUSTRIAL SCHOOL CHIEF.

Warren E. Hicks, recently appointed assistant state superintendent for industrial education of Wisconsin, is especially well equipped in education and experience for his task of organizing a system of industrial schools in the Badger state. Since graduating from the Ypsilanti, Michigan, Normal College, twenty-five years ago, he has been in turn supervising principal, county superintendent, head of industrial school and school for manual training, city superintendent of a thriving western city, and associated in the superintendency of one of the largest city school systems in the country, including special supervision of industrial education.

Mr. Hicks was born in Jackson county, Michigan, in 1865. When three years of age, his people moved to Cass County, Missouri, where he lived on a farm till he was ten years old, when the family returned to Michigan. There he attended the country school and at sixteen years of age began teaching such a school. After graduating from high school he attended the State Normal College at Ypsilanti. Following Horace Greeley's advice, he went west. After holding high school principalships for several years, he was elected county superintendent of Dickey County, North Dakota, and while hold-

ing this office organized and acted as president of the North Dakota Industrial School and School for Manual Training, at Ellendale. The national government had given 40,000 acres of land for the support of this institution, but there was a provision forbidding the sale of any of the land for less than ten dollars per acre, and since this provision at first prevented its sale, and since the state legislature felt the other state schools already organized were entitled to first consideration, much difficulty was experienced in getting money for purposes of building and maintenance. Mr. Hicks finally succeeded in securing a sufficient appropriation for the erection of the first building. The first year saw this building so overcrowded that the rather extraordinary plan was adopted of issuing revenue warrants to raise money enough for another building. Mr. Hicks persuaded Andrew Carnegie to buy enough of these warrants to erect the second building.

The state legislature now became more liberal in the way of appropriations and other buildings were soon erected. After four years of this preliminary work, Mr. Hicks gave up the county superintendency, and for two years devoted all his energies to the presidency of the industrial school. He was then called to the superintendency of the Fargo schools. After a year in this position, he was called to Cleveland, Ohio, where he spent seven years as assistant superintendent of the public schools of that city. Here he had, as part of his duties, supervision of industrial education. His connection with the Cleveland schools continued until he assumed the duties of the position which he now holds.

The recent conduct of the election be employed visits to "1. whose school "2. trol of charge ings as "3. one hu "4. end of spring at the "5. the va cal ins may b superi line of "6. variou view t ing, v "7. school to be "8. inspec ears, under the co these or oft careful all ch



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CHICAGO, ILL.

## School Room Hygiene

### Medical Inspection Rules.

The school board of Nashville, Tenn., has recently adopted a set of rules to govern the conduct of medical inspection of the pupils in the elementary schools. Two physicians will be employed by the board to make the daily visits to the schools. The rules read:

"1. There shall be two medical examiners, whose hours shall be from 8:30 to 11:30 a. m. on school days.

"2. Examiners shall be under the direct control of the superintendent, and shall have in charge the medical examinations in such buildings as he shall designate.

"3. The salary of medical examiner shall be one hundred dollars per month for ten months.

"4. These examiners shall be elected before the end of the fall term, their duties to begin with the spring term, and thereafter to be elected annually at the regular election of the teachers.

"5. They shall keep themselves informed on the various systems of school hygiene and medical inspection throughout the country, that they may be able from time to time to suggest to the superintendent what is latest and best in this line of school work.

"6. They shall from time to time inspect the various school buildings in their charge, with a view to suggesting improvements in lighting, heating, ventilating and sanitary conditions.

"7. They shall give to the teachers of the schools sufficient instruction for the examinations to be made by them, as hereinafter provided for.

"8. It shall be their duty (a) to make careful inspection of the eyes for inflammation, teeth, ears, nose, throat, of all children in the schools under their supervision, also to observe carefully the condition of the skin and the general health—these examinations are to be made once a year, or oftener, as the board may direct; (b) to make careful examinations of the vision and hearing of all children referred to them by the teachers;

(c) to make such inquiries concerning the child's physical condition to bring out the existence of running ears, mouth breathing, etc.; (d) to investigate contagious diseases, and make such recommendations to the superintendent as they shall deem best.

"9. They shall notify the parents or guardians on blanks furnished by the superintendents of all troubles which they believe should have attention. These notices shall be signed by the parent and returned to the examiner. He shall file them with the principal. Should it appear that the parents of any child are unable to pay for the necessary treatment, on the recommendation of the superintendent, the examiner shall give the treatment free.

"10. It shall be the duty of the teacher to test the vision and hearing of all children in her classes before the end of the second month of the fall term, and refer to the medical examiner all in whom she thus finds defects.

"11. Principals shall make the necessary arrangements and do what they can to assist the examiner in his work."

### A Hygiene Exhibit.

How to wash the air; why the color of the wall affects a child's vision; the "curve of learning," and the operation of the aesthesiometer and ergograph are among the exhibits to be made by the United States Bureau of Education at the first exhibition ever given in America, which deals with the general field of public health. The bureau's exhibit will show the hygiene of the school and the school child, as part of the exhibition to be held before the Fifteenth International Congress on Hygiene and Demography, meeting in Washington next September.

Among other advance information just given out, the education bureau specialists who have

the school hygiene exhibit in charge, make the statement that one exhibit will show that stuttering is about three times as common among boys as among girls.

The bureau of education's exhibit is divided into sections. The first of these considers the hygiene of the school child, taking up such subjects as food, sleep and clothing. With the co-operation of school architects and makers of school furniture and school appliances from all over the country, the bureau is also preparing exhaustive exhibits on the hygiene of the school building and the hygiene of instruction. Other sections of the school hygiene exhibit will take up the hygiene of physical defects, the medical inspection of school children and open-air schools.

### SCHOOL HYGIENE NOTES.

Memphis, Tenn. As a part of the plan to improve the social and health conditions in the city, school nurses have been provided by the health department. They will begin work in September, and will follow up the work begun by the inspectors, giving children the proper medical attention and instructing the parents in the homes.

Where the families are unable to pay for medical treatment, the same is to be provided by the health department. Physical defects which might interfere with school progress are to be carefully watched. In case of mental defects the child will be given special attention. It is planned eventually to segregate these cases and provide instruction in work which shall enable them to support themselves.


During their visits to the schools and the homes of pupils the nurses will spread the gospel of cleanliness and proper food, endeavoring to bring to pass those conditions of health for which the city is striving.

The health department of Fort Wayne, Ind., has urged the introduction of liquid soap in the schools. It is claimed the ordinary bars of soap provided are unhealthful and insanitary.



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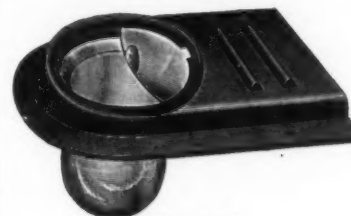
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Des Moines, Iowa

Albany, Neb. The school board has given two local dentists permission to examine the teeth of school children. Reports will be made to parents.

Kansas City, Mo. A rule requiring a certificate of good health from teachers before their appointment has been proposed. It is planned to require examinations of new teachers for certificates. Teachers already employed need only secure an affidavit from the family physician and a certificate will be issued by the city health commissioner. The main idea in the enforcement of such a regulation is the prevention of the possible employment of tubercular persons in the schools.

Chicago, Ill. Six open-air schools, twice as many as last year, will be in running order in September.

Dayton, O. Supt. E. J. Brown is endeavoring to ascertain the probable number of tubercular and anaemic children in the schools. If enough are found, an open-air school will be established in one of the school buildings. The Tuberculosis Society has promised to co-operate with the school authorities.

Detroit, Mich. The erection of an open-air school for tubercular children has caused an injunction suit to be brought in the circuit court to prevent its completion. The residents in the vicinity of the building object to its location in the neighborhood for several reasons, among which are the following: The presence of the school will endanger public health, the building will become a nuisance, and its presence will lower the value of surrounding property.

Davenport, Ia. Dr. Littig, supervisor of child welfare, has recently made a report to the board of education, in which he shows the need of medical inspection. According to the report, only 33 per cent of two thousand children examined have no physical defects. The largest number, 54 per cent, have defective teeth; 15 per cent are defective in vision or hearing; 16 per cent have enlarged tonsils; 6 per cent ade-

noids, and 5 per cent are afflicted with nervous troubles. The smallest number, 3 1/2 per cent, have enlarged glands. Thirty per cent of those having defects received attention after notices were sent to the parents.

The report cites insanitary conditions in schools and homes and makes a number of important recommendations for extending the benefits of medical inspection through the employment of three nurses.

Pawtucket, R. I. Supt. F. O. Draper, in his report to the board of education, has called attention to the good work accomplished by means of the sight and hearing tests in the local schools. The work is compulsory, under a state law recently passed, and the teachers perform the work of inspection. A record of the defects discovered is kept at the schools. Notices are sent to parents, calling their attention to the same and asking aid in remedying such defects. The inspections entail a great amount of work for the teachers, but the plan is successful in improving eyesight.

The Public Health Association and the public schools of Green Bay, Wis., united in a monster Child Welfare Exhibition, on May 16th and 17th. The exhibition was held in one of the largest auditoriums in the city.

Specimens of all kinds of school work, from the various grades and from the high schools, from the deaf school and the open-air school, were arranged in booths about the hall. The local Public Health Association exhibited several ingenious devices on ventilation and on the ravages of the white plague. One of these was a miniature model of a four-room school building, with a fan-blast system of heating and ventilation, installed to illustrate the apparatus in the majority of school buildings of the city. Another was a contrivance consisting of a figure representing "Father Time," and a procession of dolls, to show the per cent of deaths among infants from preventable diseases. Another consisted of an electric bell and light which made the visitor painfully conscious,

every few minutes, of the awful fact that another victim had just succumbed to the dread disease which the association is combatting. A model of a state sanitarium was one of the centers of attraction. A tabulated statement of the city budget was exhibited, showing the relative parts of each dollar of taxes expended for the various departments of city activity. A striking contrast was here in evidence between the amounts spent for everything else and the public health.

The school children rendered interesting programs every afternoon and evening, and a representative of the Wisconsin Anti-Tuberculosis Association gave illustrated lectures on the campaign being waged against the ravages of consumption. The visiting nurses held conferences in the afternoons with the mothers of the city on the relation of the visiting nurse and the home.

A Boston medical journal, in commenting on the increasing number of nervous and mental disorders in public schools, says that the prevention of these evils calls for reforms. Several suggestions are made, among which are the following:

The abolition of all competitive work and all rewards for excellence in school work or attendance; elimination of special examinations for promotion and the making of promotion solely dependent upon the capacity of the individual child; elimination of a fixed standard of grades for fixed ages; elimination of report cards and commendatory or laudatory certificates and the substitution of personal contact with parents; the abolition of afternoon sessions for all grades below the fifth and the substitution of educative play; the assignment of less difficult studies to the afternoon sessions for all grades above the fifth, and the reduction of the time during which concentrated attention is required in any subject; the abolition of home lessons requiring mere abstract reasoning or routine memory; the institution of special instruction, in very small classes, in certain cases.



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The machine is complete with six twelve-hour programs, which will:

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The time of signal can be changed by simply changing the position of the contact pins in the Dial or Calendar Switch, without interfering with any other part of the program.

**Case:** Golden Oak, cabinet finish.

This clock does not require special battery for its operation and it is especially well adapted for small schools. It can be connected to any push button or annunciator system.

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Our Perfection Work Bench is now used in hundreds of schools throughout the country. It is fitted with either steel rack or continuous screw side Vise, Steel Dog and Bench Stop. Can also be fitted with tail Vise.

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MUSKEGON, MICH.



### MR. YOUNG HEADS SANBORN & CO.

Mr. W. F. Young, for ten years western manager of Benjamin H. Sanborn & Co., has become president of the firm, following the retirement of Mr. Sanborn last month.

Through the change, Mr. Sanborn, who has been actively engaged in the school-book business for thirty-five years, relinquishes the management of the company to retain control of its editorial department. Mr. Sanborn is very vigorous physically and intellectually, as he has always been, and his only reason for semi-retirement is his desire for greater leisure and freedom.

Mr. Young is well known as a bookman, having entered the employ of Ginn & Company twenty-three years ago. Mr. W. S. Smyth was at that time manager for the Ginn in the west, and six years later, when he left to enter into partnership with D. C. Heath & Company, Mr. Young followed.

In 1902 he resigned to take charge of the Sanborn office, which at that time consisted of desk room with Thomas R. Shewell & Company. Since then, the western office of the house has grown immensely; in fact, has become much larger than the business of the home office.

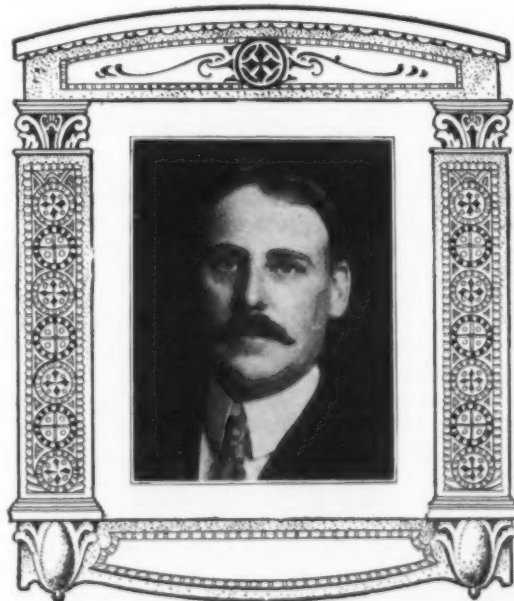
As vice-president of the company, Mr. S. C. W. Simpson, of Boston, succeeds Mr. Young. Mr. Simpson has had wide experience as a bookman for D. C. Heath & Company, and also as New England representative for the Sanborns.

As secretary, Mr. E. W. Jewett has been chosen. He was at that time a representative of Thomas R. Shewell & Company, and is one of the most popular New England bookmen. He

is a past exalted ruler of the Elks and numbers more friends among the schoolmen of the east than possibly any other two agents.

Mr. E. B. Blackburn, of the Chicago office, has been elected treasurer. Mr. Blackburn, although he has had but six years in school-book work, has had a very wide and varied experience in other lines. He is a St. Finsbury Technical College and London University man, and has had considerable experience as an engineer and business man. He is exceptionally strong as a financier and is Mr. Young's right-hand man in the conduct of the Chicago office.

The new management of Benjamin H. Sanborn & Company has every opportunity for success and the School Board Journal wishes it the largest measure of prosperity.



MR. WILLIAM F. YOUNG  
President, Benj. H. Sanborn & Co., Chicago, Ill.

### ONE ON GREEN.

The adoption of textbooks, to be used in a school for a period of years, is a serious matter from whatever aspect it may be viewed. School boards and teachers, invariably, have in mind the children who will be taught and who will find in the textbook an instrument for furthering or retarding their education. A bookman sees in an adoption a valuable contract which means much to his house, and may, or may not, seriously affect his employment.

Once in a while, however, the element of humor enters and both bookman and school committee forget temporarily the serious business which they are transacting.

This happened to Mr. J. L. Green, who represented Silver, Burdett & Company in Missouri during the recent county adoption campaign. In Cedar County, the commission looked favorably upon "Stepping Stones to Literature" readers. Very soon after the books were presented, the three members of the commission decided, however, that they would find out more about the other books published by Silver, Burdett & Company, and agreed to lead Mr. Green on. Accordingly, each of them began finding fault with the different sets of readers and led Mr. Green on to argue respectively for the Ward, for the Powers & Balliet and for the Stepping Stones to Literature readers. When Mr. Green had brought all his powers of persuasion and argument to bear upon the three, and was despairing of a sale, they finally adopted Stepping Stones to Literature, as they had originally intended.

Mr. F. L. Manasse is covering the state of Illinois for the Educational Publishing Company.

Mr. Samuel E. Caldwell looks after the Rand-McNally interests in the state of New Jersey. He resides in Newark.

Mr. R. R. Larkin has been representing Ginn & Company in southern Missouri since Jan-



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Virtue in a System of  
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have not really been written.  
They are only an attempt at  
writing.

Shorthand notes that can be read  
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"puzzling-out" are a nuisance to  
the writer and to his employer.

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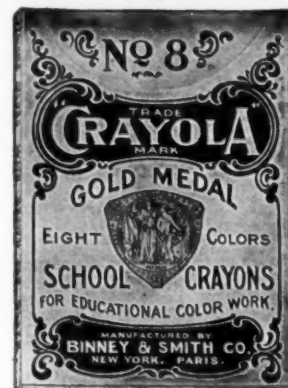
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in every  
Playground

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## THE PERFECT SCHOOL PENCIL

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Drawing



The  
LEAD IS GRITLESS; DURABLE; UNIFORM.

Made in 4 Grades: B., H. B., H., N. H.

**EBERHARD FABER**

**NEW YORK**

uary. He made Springfield his headquarters  
and looked after county adoptions in the state.

Mr. Stuart Eagleson, who for many years has  
covered the state of Michigan in the interest of  
Ginn & Company's high school and college  
books, recently spent two months in the West,  
where he was associated with Mr. E. F. McGinnis.  
Mr. McGinnis, who formerly traveled in  
Michigan, now travels for the states of Utah,  
Wyoming, Idaho and Montana. He resides at  
Salt Lake City.

Mr. H. D. Cornwall, who for the past two  
years represented Ginn & Company in Michigan,  
has resigned to look after his business interests  
at Beaver Falls, N. Y.

Mr. B. O. Martin, who has been doing special  
work in Missouri for Charles E. Merrill Com-  
pany, has returned to Ohio.

Mr. Geo. M. Cake, who for twenty-six years  
was in charge of the inside work at the Philadel-  
phia office of Silver, Burdett & Company, has  
recently taken charge of southern New Jersey  
for the firm. Mr. Cake continues to reside in  
Philadelphia.

Mr. J. F. Organ, who has represented Hough-  
ton Mifflin Company for the past five years in  
southern Illinois and Indiana, has resigned to  
accept a business position in his home city of  
Vincennes. He is succeeded by Mr. Charles M.  
Gash, of Illinois.

Mr. Samuel L. Walker represents Ginn &  
Company as general agent in the state of New  
Jersey. He makes his headquarters in New  
York City.

Mr. Milton Gantz looks after the high school  
and college interests of Ginn & Company in  
northern Illinois. He resides in Elgin.

Mr. P. H. Vernor continues to represent Al-  
lyn & Bacon in Indiana. He makes his head-  
quarters in Indianapolis.

Mr. Ralph C. Lane looks after the interests  
of Scott, Foresman & Company in Indiana.

Mr. I. E. Neff, principal of the high school at  
Richmond, Ind., will represent D. Appleton in  
Indiana this summer.

Mr. Earl Richardson, who represents the Mac-  
millan Company in Indiana, has recently gone  
back on form-letters. His usually reliable office  
girl, in one fatal instance, failed to insert the  
portion of the salutation which follows the  
printed word DEAR, which omission deprived  
the salutation of its usual formality. This would  
not have been so interesting had not this par-  
ticular letter gone to the wife of a good book-  
man friend of Mr. Richardson, who appreciated  
the situation. A cigar and an apology saved the  
day.

Mr. J. S. Adams continues to look after the  
interests of Ginn & Company in eastern New  
York state. He resides in Albany.

Mr. Geo. R. Ellsler represents the Macmillan  
Company in the state of Maryland and the Dis-  
trict of Columbia. He occasionally, also, trav-  
els into southeastern Pennsylvania. Mr. Ells-  
ler makes his headquarters at 711 E. 21st St.,  
Baltimore, Md.

Mr. R. L. Bower, for more than thirty years  
a representative of the American Book Com-  
pany, has severed his connection with the firm.  
Mr. Bower was the Cincinnati agent for many  
years and recently worked in the South. His  
plans for the future have not been made known.

Mr. John S. Gallagher, of the Chicago office  
of Little, Brown & Co., recently represented his  
house in the Utah city adoption campaign. He  
is now traveling in California, looking after  
the county list changes.

Mr. Andrew Lester is the Pennsylvania state  
representative for the A. S. Barnes Company.  
He reports a particularly busy season for the  
Barnes publications.

Mr. K. N. Washburn, secretary and general  
manager of the G. & C. Merriam Company,  
spent four weeks, recently, sailing up the coast  
of Maine.

Mr. M. E. Banks, who looks after the inter-  
ests of Silver, Burdett & Company in Connecti-  
cut and New Hampshire, is chairman of the  
Town School Committee of Fairfield, Conn.

The Dobson-Evans Company is the name of a  
new firm of publishers and school supply dealers  
recently established in Columbus, Ohio. The  
partners are two old-time bookmen, Mr. S. C.  
Dobson and Mr. Alan Evans. The firm is a  
special representative of the Milton Bradley  
kindergarten and school supply products for  
the states of Ohio and West Virginia. They  
also publish a list of uniform tablets and note-  
book covers and sell general school supplies and  
furniture. Mr. S. C. Dobson, senior member  
of the firm, was formerly Ohio representative  
for the Educational Publishing Company and  
has wide experience in book and supply work.

Mr. Alan Evans has been a representative of  
the Milton Bradley Company in Ohio for sev-  
eral years. Both men are well acquainted and  
are making a splendid success of their venture.

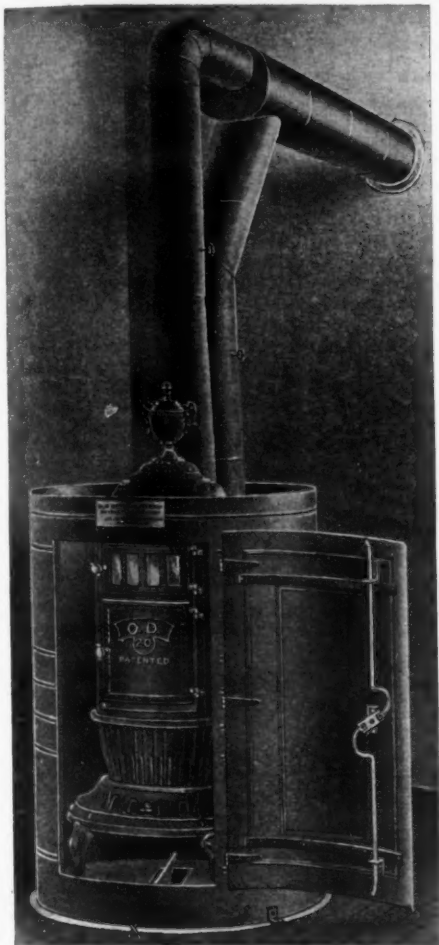
Mr. F. E. Morrow, superintendent of schools  
at Central City, Neb., for three years past, has  
accepted a position with Rand, McNally &  
Company. Since May first, he has been work-  
ing county adoptions in Missouri and South  
Dakota. About the middle of July he will take  
over the Nebraska agency of the firm at Lin-  
coln.

Mr. H. P. Conway, of Ginn & Company, is a  
specialist in crocodiles. At least his friends  
in the book fraternity say so. Mr. Conway re-  
fuses to divulge the reason for his specialism.

Mr. W. B. Walter represents Ginn & Company  
in Minnesota and makes his headquarters at  
Minneapolis.



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**Minimum Cost---  
Maximum Results**

### "The Spirit of Progress"

is exemplified in the Nation Wide Movement for better and more sanitary heating and ventilating of our schools, particularly in rural districts. The OLD DOMINION PATENT HEATING AND VENTILATING SYSTEM IS DAILY GROWING IN DEMAND in every State in the Union. Why?

It does not re-heat and circulate the foul air in the room. It warms the room with pure fresh air and combines a duct or pipe to exhaust the vitiated or foul air. No other system does this.

It does not require a separate independent foul air flue of brick or metal as all other systems do.

It is simple, easy to set up, and easy to regulate. All other systems are complicated.

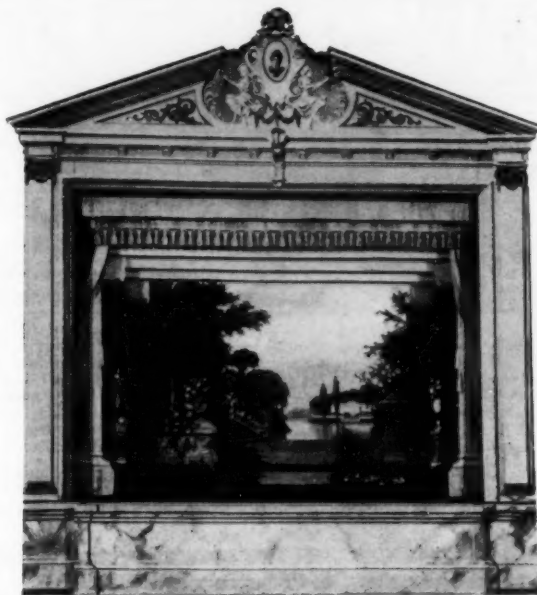
It does not clog with soot and rot out, requiring expensive experts to repair; other systems do.

It draws the foul or vitiated air from the floor of room by a syphon suction combined with the heater; no other system can do or does do this.

It is the cheapest of all heating and ventilating systems, because it combines heater, ventilating drum, ventilating mat, stove pipe and foul air pipe or duct. Pipe furnished free 5 feet from center of heater, additional lengths of large pipe, 50c. per foot. All other systems require expensive independent foul air flues or ducts, either metal, brick or stone.

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We make a specialty of this kind of work and have two large studios devoted expressly to the building of stage scenery.

We also furnish fireproof Asbestos Drop Curtains, Stage Hardware, Stage Carpets, Lights, etc.

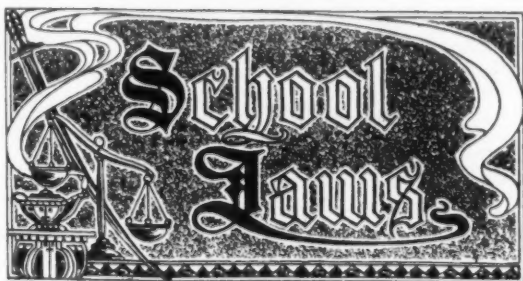
Have supplied hundreds of school auditorium stages with Drop Curtains and scenery.

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### School Taxation.

Under the New Jersey tax act, paragraph 3, making the buildings of schools for feeble-minded exempt from taxation, applies only when the institutions are conducted as charities by corporations authorized to carry on such charities.—Bancroft Training School vs. Borough of Haddonfield, N. J.

A special school tax levied by a school sub-district, in accordance with the Kentucky statutes (paragraph 4426a, subdivision 9), cannot be expended for the purpose of transporting children to and from school.—Shanklin vs. Boyd, Kentucky.

Under the Georgia Civil Code of 1910, paragraph 1535, the time for holding an election on the question of local taxation for educational purposes is held not to be fixed at any given time from the granting of the order calling the election.—Dobbs vs. Hardin, Ga.

Under the Georgia Civil Code of 1910 (paragraph 1537), a school tax is not illegal because it is levied by the board of trustees and the county commissioner instead of the secretary of the board of trustees and the county school commissioner.—Id.

Under the Texas School Laws, c. 57, the trustees of an independent school district cannot assess property for taxation for school purposes at a higher valuation than assessments for state and county purposes.—Gulf C. & S. F. Railway vs. Blum Independent School District, Tex.

### Claims Against School Districts.

In an action against members of a school board in their official capacity to enjoin the sale of school district property, etc., the district is the

real party in interest.—Consolidated School District No. 2, Garfield County, vs. Veelson, Okla.

One who teaches in a public school when he has no right to do so cannot recover compensation.—Flanary vs. Barrett, Ky.

### School Funds and General Regulations.

The North Dakota school laws (Session laws of 1901, c. 85) creating a fund for clerical assistance to the superintendent of public instruction in reading teachers' answer papers. This fund is held to be public money for the unexpended balance of which the superintendent is accountable to the state.—State vs. Stockwell, N. D.

A school district of the state of Delaware is an independent public corporation from the city.—Kuhn vs. Thompson.

A special school district, under the North Dakota laws, is a defacto school corporation whose due organization will not be inquired into in mandamus.—State vs. Ferguson.

The North Dakota school laws, paragraph 47, in giving the state superintendent of public instruction authority to disburse fund for clerical assistance for reading teachers' answer papers, held not to constitute him the owner of the fund.—State vs. Stockwell.

Burden of establishing title to fund collected under the North Dakota school laws (Session laws of 1901, c. 85) in state superintendent of public instruction individually held to be upon him, and not on the state to establish want of ownership on his part.—Id.

Under the North Dakota school laws the state superintendent of public instruction is required, not later than the expiration of each term of office, to account for unexpended balances of funds for clerical assistance in reading teachers' answer papers.—Id.

Under the Florida laws the trustees of a state school tax district have no authority to lease school property.—Special Tax School District No. 1, Leon County, vs. Lewis, Fla.

### School District Debts.

Bonds issued for the purpose of the Detroit Library Commission are held to be of the same character as bonds issued for school purposes.—Kuhn vs. Thompson, Mich.

Under the Michigan state constitution and other laws the limit of indebtedness in the Detroit city

charter is two per cent of the assessed valuation. The laws do not apply, however, to school and library bonds.—Id.

Charlotte city charter of 1907 held to give to the school commissioners exclusive control of the public schools with power to purchase sites, so that proceeds of a sale of bonds under Priv. Laws of 1911, c. 317, must be turned over to the treasurer of the commissioners.—School Commissioners of the City of Charlotte vs. Board of Aldermen of City of Charlotte.

Suspension of pupil from school held an expulsion, which could not be sustained in the absence of a hearing, under the revised laws of Massachusetts (c. 44, paragraphs 7 and 8).—Jones vs. City of Fitchburg.

### SCHOOL LAW NEWS.

Dayton, O. An independent school for unvaccinated children, which was recently established by the East Dayton Citizens' League, has been closed by the Dayton board of health. It is expected that injunction proceedings will be begun against the board of health to compel the reopening of the school. The court action will, no doubt, result in a test case.

Following a meeting of the Indiana State Dental Association, a resolution was passed endorsing the proposed legislation by which school boards may provide dental inspection for school children. It is not intended by the association that any attempt shall be made for the passage of a bill compelling the inspection of children, but merely to support a bill asking that school boards be given authority to provide such inspection. It is confidently expected by dentists that the passage of such an act would be a step toward compulsory state dental inspection of school children.

Attorney-General Honan of Indiana, in an opinion to Charles A. Greathouse, state superintendent of public instruction, has recently held that the decision of a county board of education, composed of township trustees and the presidents of the town school boards, in adopting high school texts must be binding on the school authorities of every high school in the county.

The Detroit board of education has recently received an opinion from the corporation counsel that it is not liable for damages for accidents that may happen in the elevators of the Central high school. The elevators are crowded to their





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**FOR ALL GRADES OF SCHOOL AND ART WORK**

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Write for beautiful souvenir catalog (sent free) describing these colors together with many other art work materials. Address our nearest office.

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that have claimed our National Dustless Crayon contains Plaster of Paris or other injurious material we offer

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Send for samples of National Dustless Crayon and compare the marking and erasing qualities with any other crayons manufactured.

National Crayon is entirely free of Plaster of Paris, Grease or other unsanitary material, and we are prepared to prove this statement beyond question.

If your dealer will not supply you with National Crayon, we will be pleased to furnish you the name of dealer that will.

#### *To Dealers and School Supply Houses:*

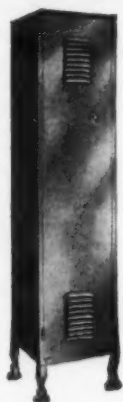
We want you to handle a crayon that you can guarantee to give entire satisfaction on all classes of Blackboards, a crayon that writes and erases with least effort, and is always uniform in quality.

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WHEN THE SCHOOL BOARD OF ONE OF OUR LARGER CITIES WAS CONSIDERING CONTRACTING FOR LOCKERS FOR ANOTHER YEAR,



### "THE FEDERAL

**HAS GIVEN US A BETTER LOCKER FOR LESS MONEY—AND PROMPT DELIVERIES"**

THERE ARE PLEASED CUSTOMERS IN YOUR NEIGHBORHOOD — LET US REFER YOU TO THEM.

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CHICAGO



### GAS STOVES FOR DOMESTIC SCIENCE DEPARTMENTS

**George M. Clark & Company, Div., Chicago**

capacity during certain hours, and the real estate committee of the school board desired to know if it would not be advisable to take out a policy of indemnity insurance.

Counsel Atkinson replied in effect that the operation of the elevators is a part of the governmental function of the board and that any person injured in one of them must suffer the loss himself unless he carries accident insurance of his own.

The Conference for Education in Texas has declared for the submission of a constitutional amendment by the next legislature of the Lone Star state, providing for majority rule in school tax elections of cities that have assumed control of their public free schools, and removing the present maximum of district school taxes.

The necessity for this amendment lies in the fact that there are two classes of independent school districts in Texas: (1) The incorporated city or town which has control of the public free schools within its limits; and (2) the town or village incorporated for school purposes only. In 1908 the people adopted an amendment to Section 3, Article VII, of the constitution, raising the limit of the school district tax to fifty cents and providing the authorization of the tax by a majority vote. This amendment was put into effect by the legislature in 1909, and the independent school districts, not cities and towns, placed on the same basis with respect to taxes and bonds as common school districts, the constitutional limit of fifty cents being allowed to both.

The status of the independent district proper, or town or village incorporated for free school purposes only, as distinguished from the city or town which has control of its schools, is that its taxes for maintenance and for bonds may be authorized by majority vote, that any rate up to twenty-five cents, or, if there are no outstanding bonds, the entire fifty cents, is available for maintenance purposes.

The class to which a given independent district belongs must be determined from its incorporation record. There are 114 independent school districts of the first class, in which two-thirds majority is necessary in order to levy taxes for the support and maintenance of the public schools. This amounts to a discrimination against these dis-

tricts, and calls for a constitutional amendment to make uniform the law applying to all school districts.

The injustice of the present law is well illustrated in the election held in Dallas on April 2 last which resulted in a vote of 3,232 for the tax and 1,715 against the tax, and was declared not carried, and thereby the will of the majority thwarted.

The appellate court of Indiana has recently held that the school trustees of South Bend were within their authority in employing Calvin Moon as superintendent of the city schools for three years, from September 5, 1908, at a salary of \$2,000 a year. The contract was made in March, 1908, and all of the terms of office of the members of the school board expired before the end of the contract.

The court held that the action of the board of school trustees, as constituted in August, 1909, in discharging Mr. Moon on the ground that the contract was beyond the power of the members of the former board, made the school city liable for damages to him for the termination of the contract.

The decision was made in reversing the St. Joseph circuit court in holding that one board could not tie the hands of the succeeding boards.

The appellate court says that the board is a continuous body, though its members may change, and has a right to make contracts for superintendents of the schools for such terms as may be necessary to insure good superintendents. The fact that the discretion thus imposed upon the board may possibly be abused cannot take the power away to contract in good faith.

School boards in the state of Ohio cannot pay to superintendents tuition fees received from non-resident pupils, according to Attorney-General Hogan. The practice of employing superintendents for a stipulated salary, plus foreign tuition monies, is absolutely illegal according to an opinion of Mr. Hogan rendered to State School Commissioner Miller.

Declaring that graduating exercises are not a part of the course of study of the public schools, Assistant Commissioner of Education J. B. Betts of New Jersey has recently rendered an opinion directing the East Orange school board to issue a

diploma to John H. Bartlett. The diploma was withheld last year because of the failure of the young man to deliver the valedictory oration or a satisfactory substitute therefor.

The attorney-general of Indiana, in an opinion rendered recently to State Superintendent C. A. Greathouse, has declared it illegal for a school corporation to maintain a summer school solely to enable pupils who have failed to obtain a passing mark at the close of the school year. Where summer schools exist they must be open to all persons of school age.

State Superintendent F. G. Blair of Illinois has declared, in a recent opinion, that a school district may acquire additional land for playgrounds without a referendum. The question of acquiring the original site for a school must be submitted to a vote, but it may be added to at the wish of the board.

The board of education at Springfield, Ill., desired to purchase a piece of property adjoining one of the schools for the purpose of extending the playgrounds surrounding the same, and the question was raised as to whether the board had a right to purchase the land without a referendum vote.

Washington, D. C. The corporation counsel of the District of Columbia has recently rendered an opinion which declares illegal the use of the public school buildings for recreation centers. The law requires that the schools be used for educational purposes only and no funds have been appropriated by the board for instructors. The board has appointed a committee, whose work shall be the preparation of an amendment to the law, making the public use of school buildings possible.

Members of fraternities in Kansas have subscribed a fund of \$8,000 to test the constitutionality of the Kansas anti-fraternity law. Representatives of the organizations will visit Kansas City to investigate the contest in that city, and if necessary, take it to the courts to ascertain whether high school faculties have a right to bar students from membership in such societies.

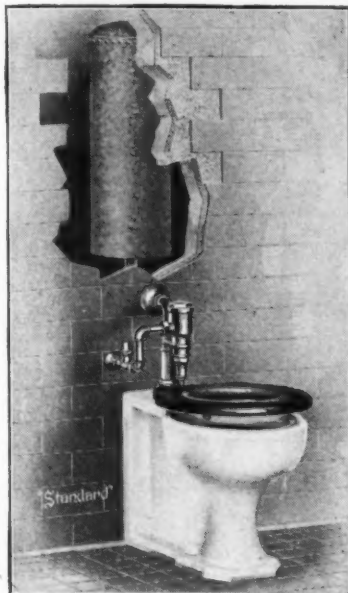
In teaching, methods are potent, but personality is more potent.

School news is cheap if you get it from a gossip.





Plate P 8850—Angle Flange Closet with Syphon Jet Bowl. Automatic Seat Action. Strong and Sanitary.



Method of concealing Tank. No Mechanism in Tank, therefore cannot get out of order.



Plate P 8852—Juvenile Angle Flange Closet, Syphon Jet Bowl, Raised Rear Local Vent.



Tank concealed in Utility Corridor, out of the reach of children

The foundation of sanitation in the school is the toilet room.

The fundamental feature of the toilet room is the closet.

School Boards fully realize the responsibility which rests with them in providing the proper sanitary safe-guards for the pupils under their charge, but it is evident that much confusion arises in selecting closets, due to the conflicting claims of manufacturers regarding the supremacy of their fixtures.

Without a knowledge of requirements and local conditions, it is difficult to say just what type and character of closet will fulfill all requirements. We prefer that our recommendations be based on study, not upon guess. We desire to aid, not to confuse.

The need of expert advice in planning the sanitary equipment of schools became so apparent that we acquired the services of a well known sanitary engineer who will aid those who desire, in making plans and specifications. He will gladly lend his advice in the solution of your sanitary problems, and without the obligation to bind you to the use of our goods.

The fixtures shown on this page are the "Standard" Duplex Automatic type, of which many others are shown in our General Catalogue "P". In all, more than 100 pages of our Catalogue are devoted to high grade closets for every purpose and we feel that from it, every requirement and condition can be intelligently met.

"Standard" Catalogue "P" is in the hands of Jobbers, Architects, and Plumbers, and displays of "Standard" Closets are maintained in "Standard" Showrooms. Catalogue "P" also illustrates a full line of Lavatories, Urinals, Sanitary Drinking Fountains and other School Fixtures.

## Standard Sanitary Mfg. Co.

Largest Manufacturers of Plumbing Fixtures in the World

General Offices, Pittsburgh, U. S. A.

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Pittsburgh.....	106 Sixth Street	Toronto, Can.....	59 Richmond Street, E.
Cleveland.....	648-652 Huron Road, S. E.	Montreal, Can.....	215 Coristine Building
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Plate P 8860—Another style of Vented Bowl. These closets greatly assist in ventilating entire toilet room.



The "Duplex" Valve is outside of bowl leaving the inner part of bowl free and sanitary.

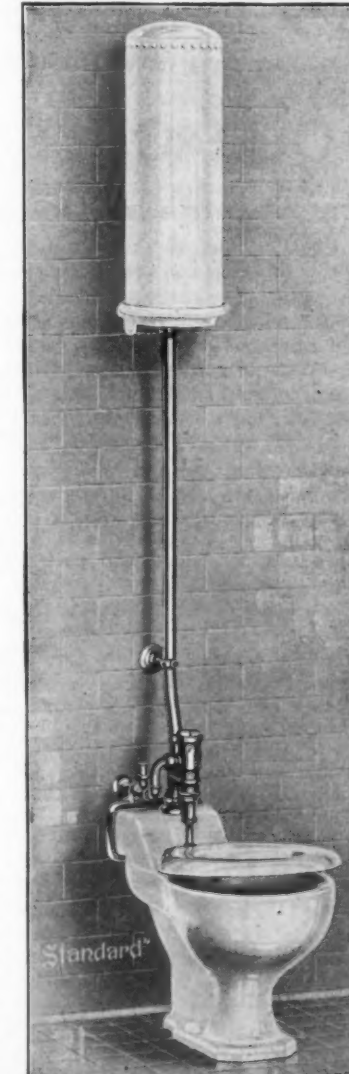


Plate P 8862—Closet with Centripetal Syphon Jet Bowl, Raised Rear Local Vent, High Tank.









#### TO PARENTS OF SCHOOL CHILDREN.

Please note that all cases of diphtheria, scarlet fever, measles, German measles, chicken-pox, mumps and whooping cough should be reported at once to the Bureau of Health. If such notice is delayed, your children are kept out of school longer than is otherwise necessary.

See that the doctor reports the case to the Bureau of Health at once.

If you have no doctor, then report the case yourself, at once, to the Bureau of Health, City Hall, or to the principal of the school, who will notify the Bureau of Health for you.

This refers to any case in your family, whether it be an infant, a school child, or an adult.

To the above were added lists of school and health officers and a list of bureaus and departments to which citizens might apply in cases of accident or trouble.

to discuss during the opening exercises with the idea of impressing some civic or personal virtue or some good habit upon the children. The topics were arranged in the form of mottoes, printed on white cards large enough to be read in the classrooms. On the back of each card was printed a series of suggestions for little talks which the teachers might give their pupils. Below are the suggestions for discussing the topic of "Health."

#### Suggestions.

A sound mind in a sound body is an ideal always to be striven for. From time to time discuss the following topics with your pupils and make a strong effort to get them practiced in their daily living. Insist not only on knowing but particularly on the *doing*.

1. *Air.* Fresh air and sunshine are necessary to good health. Cold or damp fresh air does not harm if the skin is kept warm. Night air is as good as day air. Breathe only through your nose. Avoid hot, dusty or damp rooms. Let in fresh air and sunshine. Form the habit of sitting, standing and walking erect; and of breathing deeply.

2. *Food.* Remember that plain foods are the best. Eat slowly and chew thoroughly. Drink water freely, but not ice water.

3. *Exercise and Rest.* Regular exercise is essential to good health. Walking in the open air is one of the best of exercises. Go to bed early, and have the bedroom windows open at all times. Never sleep in a damp bed.

4. *Clothing.* Wear only loose clothing. Wear no more clothing than you need for warmth. Don't keep on rubbers, leggins or extra wraps of any kind in the schoolroom. Avoid wet feet and damp clothing.

5. *Cleanliness.* Consumption and other diseases are due largely to a lack of cleanliness.

Keep clean. Bathe frequently. Wipe dry the body quickly after your bath.

Keep your finger nails clean, and wash your hands frequently. Always wash your hands before eating.

Clean your teeth after each meal and before going to bed. Have them examined by a dentist at least once a year.

Do not hold your money, pencils, pins, or other things in your mouth.

Do not lick your fingers while turning the pages of a book or counting money.

Avoid all use of alcohol or tobacco in any

form. Tea, coffee, candy and gum are harmful to children.

6. *Light.* Always read or work in good light, but let it strike the page or object from over the shoulder—never let it shine directly on your eyes.

7. *Tests.* Teachers should test sight and hearing of all pupils at least once a year.

S. E. RAINES, Superintendent of Schools.

The school board at Goldsboro, N. C., has recently adopted a form which combines upon one sheet the official notice to a teacher of her election and the contract which she makes with the schools. The letter of notification includes a statement of the position to which the teacher has been elected, the amount of salary to be paid, the length of the school term, the holidays allowing deductions which are to be made for absences, etc.

#### NOTICE

The Chester City School Board meets the second Friday of each month. All bills with the proper voucher attached, must be received by the Secretary at least five days before the meeting, otherwise will not be considered during meeting of same month.

A. LINCOLN CASTLE,  
Secretary.

#### Notice Form.

Business houses dealing with school boards frequently complain that their accounts are unduly delayed in payment. They forget that secretaries and treasurers cannot pass upon invoices without submitting them to the scrutiny of a committee of busy men who can meet only once or twice each month. To encourage the prompt sending of bills by publishers and supply manufacturers, Mr. A. Lincoln Castle, secretary of the Chester, Pa., school board, has devised the form reproduced above. A copy is sent with each order for the schools and, also, accompanies checks and warrants in payment of goods. The blank has had the effect of increasing a good feeling between merchants and school board officials.

Supt. S. E. Raines of Freeport, Ill., has for several years prepared monthly topics for teachers

#### SPECIAL TOPIC No. 8

# HEALTH

"Good health and good habits go hand in hand."

"Life is not to live but to be well."

"Reason's whole pleasure, all the joys of sense,  
Lie in three words—HEALTH, peace and competence."

(Keep for future use.)

(Suggestions—See other side.)

The contract includes the acceptance of the position as specified in the notice and an agreement to comply with all the rules and orders of the superintendent and the board of school trustees. The blanks are sent to teachers in duplicate and one copy is kept on file in the school board offices.

The so-called "primary school fund" of the state of Michigan cannot be used by schools of that state in paying salaries of teachers past due. When the primary money is exhausted taxes must be voted or bonds must be issued to make up for any deficiency that may occur.



Has it occurred to You

that **Wilcox Rapid Acting Vises** are

**WITHOUT A COMPETITOR?**

The fact that thousands are in use among leading Manual Training Schools, and approved by competent teachers encourages us to offer a Vise on trial free of charge



Made in two sizes, with and without stops.  
Two styles, iron jaws and all-steel jaws.

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Hear our story on Vises and  
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our satisfied customers.

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AURORA, ILL.

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Applied on thousands  
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Manufacturers of

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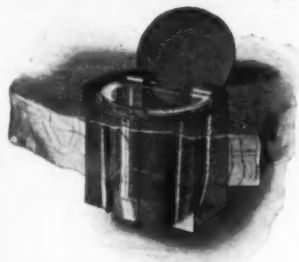


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Other Patents pending.

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School House Architects

Carthage, Illinois

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BLACK BOARD

IF there is anything on earth that will please you, it is Silicate goods. Used constantly thirty-nine years in all the public schools in New York, and all the principal Boards of Education in the large cities. We guarantee every shipment. They are the best made goods. Send for our illustrated catalog.

Manufactured only by the

**N. Y. Silicate Book Slate Co.**  
20-22-24 Vesey St., New York

# Teachers' Salaries.

Rules governing the retirement and pensioning of teachers employed in the schools of Pittsburgh have been recently adopted by the school board of that city. The leading features are a provision that the annuity paid to regular instructors be \$500 and that any teacher who has taught 250 full months in any part of the United States shall be eligible. It is also provided that teachers who have taught for fifteen or more years in the Pittsburgh schools, and present evidence of disability, may be permitted to retire on an annuity during the period of disability to be based upon the number of years' service.

Bellefonte, Ill. Female teachers receiving less than \$70 per month have been granted an increase of \$25 per year.

Wyandotte, Mich. Grade teachers have been granted an increase of \$25 per year, and high school teachers \$50.

Aurora, Ill. As a result of the Illinois law, requiring the creation of a pension fund for teachers in all cities and villages of the state, the teachers have made plans for a local teachers' pension fund. The plan of raising the money for the fund is the same as that followed elsewhere. Teachers will be pensioned after twenty-five years' service and will receive an annuity of \$400 per year if the fund is large enough.

Omaha, Neb. The local teachers have begun a campaign for higher salaries.

Pasadena, Cal. The city teachers have requested an increased salary to \$1,200 per year

for grammar grades and a sum to be decided by the board for kindergarten and high school instructors.

Connellsville, Pa. The salaries of all teachers have been raised ten per cent.

Rochester, N. H. The salaries of principals have been increased \$50 per year.

Rockford, Ill. The teachers have made the first payment into the pension fund. Assessments are made according to the length of service, those longest in the school work paying the highest amount. The money set aside on the first assessment amounted to \$1,070.30.

Salt Lake City, Utah. Under a new schedule adopted by the board of education, the salaries of the three grades of teachers in the elementary schools will be \$480, \$540 and \$600 per year, respectively, with an increase of \$50 each year, until a maximum of \$1,020 is reached.

In the high school, teachers will receive \$800, \$850, \$925 and \$1,000, with an increase of \$50 per year, until the maximum of \$1,400 is reached. Vice-principals will receive \$2,100 and heads of departments \$1,600.

Rushville, Ill. The school board has increased the salaries of the first grade teachers.

Champaign, Ill. Principals of the grade schools have been granted an increase of \$35 per year.

Berlin, Conn. The teachers have been granted an increase of three per cent.

Joliet, Ill. The high-school teachers have received increases in salary averaging \$100 per

year. The principal's salary has been increased from \$3,900 to \$4,000 per annum.

Omaha, Neb. The grade and kindergarten teachers have petitioned the school board for an increase of the maximum pay from \$830 to \$1,000.

Marquette, Mich. Teachers who have not received the maximum salary have been advanced \$25 per year. The maximum salary is \$650.

Hillsboro, Ill. Grade teachers have been increased \$5 per month.

Moline, Ill. Grade teachers have been granted an increase of \$5 per month.

Oakland, Cal. The board has granted increases to janitors, ranging from \$5 to \$25.

Springfield, Mass. The school committee has increased 80 per cent of the salaries of teachers by amounts ranging from \$10 to \$100.

Reading, Pa. The school board has created a \$35,000 retirement fund, and teachers who have been actively engaged in teaching thirty years and wish to retire, may be placed on the pension list.

Columbus, O. The maximum salary of high-school teachers has been raised from \$1,400 to \$1,500 per year; the minimum for elementary teachers has been raised from \$450 to \$500.

Pittsburg, Kans. The teachers' committee has recommended to the board that the salaries of first, seventh and eighth grade teachers be increased so that the maximum will be \$67.50 per month and that the high school instructors be raised \$2.50 per month. It was also recommended that teachers of grades two to six and principals be increased \$2.50 per month.

Kansas City, Kans. The following scale of teachers' salaries has been adopted: Grade teachers, first year, \$60; second year, \$68; third year, \$76; fourth year, \$84; fifth year, \$92, and sixth year \$100. For the high school a scale ranging from \$1,125 to \$1,710 has been adopted.



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Patents allowed and pending.

**Provide running water** for schools without a satisfactory water supply under pressure. It offers every advantage of a pure city water supply at a price within the reach of every district school.

## Wolverine Pedestal Fountain

affords a most attractive and inexpensive fountain for cities where they have water systems. The bowl is closed at the top and so constructed that children cannot throw refuse in at the top as is common with other pedestal fountains on the market.

We also have a complete line of bubblers to attach in place of faucets.

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**The Gier & Dail Mfg. Co.**

**LANSING, MICH.**

*Agents wanted in every county*



**WOLVERINE  
Pedestal Fountain**

Perry, Ia. Teachers in the first four grades and high school instructors have been granted increases from \$2.50 to \$5 per month.

Des Moines, Ia. Teachers' wages have been increased in an aggregate of \$25,000 per year.

New London, Conn. The salaries of the teachers have been increased. The schedule provides a maximum rate as follows:

Grade one, \$525; grade two, \$525; grade three, \$575; grade four, \$625; grade five, \$675; grade six, \$675; grade seven, \$725; grade eight, \$750. The scale provides an increase of \$25 per year in the first six grades and \$50 in the seventh and eighth grades. Principals will receive a salary of \$1,000 per year.

Supt. Henry P. Emerson, of Buffalo, has called the attention of the Board of Aldermen to a provision of the teachers' salary ordinance which he believes works out differently from that intended when the ordinance was adopted. He states that an opinion of the corporation counsel is to the effect that as the ordinance now stands a teacher promoted from a grade to a principalship, or to any other position of a more difficult character and carrying a higher salary, is at once entitled to the maximum of the new position. Supt. Emerson states: "In my judgment such a practice would be unbusinesslike and contrary to right principles of school management." He asks that an explanatory clause be added to the ordinance providing that the teacher shall receive the first year the minimum salary and gradually receive more until the maximum is reached.

Knoxville, Tenn. The school board has recently raised the maximum pay of grade teachers from \$60 to \$70 per month and of principals from \$85 to \$90 per month.

Flint, Mich. The school board has recently adopted the following schedule of salaries to go into effect in September:

The maximum salary of grade teachers shall be \$650, and of high school teachers \$900. The minimum salary for untrained grade teachers

shall be \$350, and for grade teachers with two years' special training \$400, high school teachers \$500. Grade teachers receiving less than \$450 per year shall be entitled to a raise of \$50.00, and for those receiving more than \$450 per year \$25.00 until the maximum shall have been reached. High school teachers receiving less than \$600 shall be entitled to a \$50.00 raise, those receiving \$600 or more a \$25.00 raise until the maximum shall have been reached.

### New Pittsburgh Schedule.

Pittsburgh, Pa. The following schedule of salaries has been adopted:

District supervisors of special subjects, with the exception of manual training, will be paid a salary of \$1,000, with increases of \$100 until a maximum of \$1,600 is reached. Supervisors of manual training will receive \$1,500, with increases of \$100 up to \$2,100.

Teachers of household economy will receive a minimum salary of \$600 and annual increases of \$50 up to \$1,050. Manual training teachers will be paid \$800 and will receive increases of \$50 until a maximum of \$1,500 is reached.

Directors of kindergartens will begin at \$600 and will receive increases of \$50 until a maximum of \$900 is reached. Assistants will receive \$500, with increases of \$50 up to \$550. Teachers of the first seven grades will receive \$500 and will be increased \$50 per year up to \$900. Eighth grade instructors will receive \$500 and will be increased \$50 per year up to \$1,050. Teachers of ungraded rooms will be paid \$500 and annual increases of \$50 up to \$1,100.

The salaries of principals will be based upon the number of rooms. Principals of buildings with sixteen or more rooms, \$2,100, with increases of \$100 up to \$2,600; ten or fifteen rooms, \$1,600, with increases of \$100 up to \$2,000; principals of buildings with less than ten rooms, \$1,100, with increases of \$100 up to \$1,500. Principals of buildings with six rooms or less will have charge of one room and will be

required to teach under the above salary schedule. Assistant principals will be paid \$1,100, with \$100 increases up to \$1,500.

High school principals will receive a salary of \$2,500, with annual increases of \$100 until a maximum of \$3,000 is reached. Instructors will receive a minimum salary of \$1,000 and will receive annual increases of \$100 up to the maximum of \$2,300.

### A Promotional Schedule.

The school board of Ottawa, Kans., has recently adopted a salary schedule for the teachers and principals in its employ. By it the teachers are divided into five classes, A, B, C, D and E. There are three considerations upon which the teachers will be graded for efficiency. Native ability counts fifty per cent and includes originality, self-control, vivacity, enthusiasm, tact, sympathy, industry, adaptability, sense of humor and fairness. Each of these points counts five per cent.

Acquired efficiency is the second division and counts thirty-five per cent. It includes academic education, teaching ability, discipline, ability to organize and present subject matter, each five per cent, and professional training, interest in education, appreciation of values, professional growth and preparation, each three per cent. Professional growth includes reading, study and travel. Preparation includes daily, weekly and annual work.

Social efficiency is the third and last consideration and counts fifteen per cent. It includes ability to secure and hold the respect of the pupils and the community and counts ten per cent, and loyalty to associates, principals, superintendent and board, which counts five per cent.

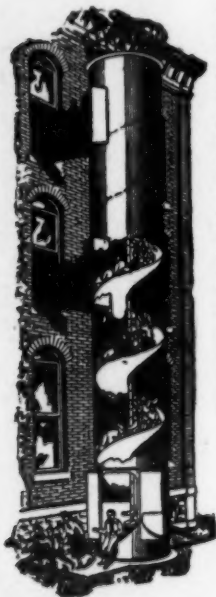
These three divisions make the 100 per cent by which a perfect teacher is determined. In the schedule, Class A is from 100 to 95 per cent; Class B, 94 to 90 per cent; Class C, 89 to 85 per cent; Class D, 84 to 80 per cent and Class E, below 80 per cent.



**SIMPLIFY**

your shorthand work. Barnes' Practical Course will show you how. A paper-bound copy will be sent free of charge to any shorthand teacher requesting it. Specify system desired—Benn Pitman or Graham. Please give name of school.

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They could not be better if they cost twice as much



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**SCHOOLROOM DECORATION**

These Art Productions have never failed to receive the highest award when placed in competition with other makes.

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Following are the salaries for the teachers as they rank in classes in the different departments:

Teachers in all grades: Class A, \$70; Class B, \$65; Class C, \$60; Class D, \$55; Class E, \$50.

High school teachers: Class A, \$90; Class B, \$85; Class C, \$80; Class D, \$75; Class E, \$70.

Principals of 6-room buildings: Class A, \$85; Class B, \$80; Class C, \$75; Class D, \$70; Class E, \$65.

Principals of 8-room buildings: Class A, \$90; Class B, \$85; Class C, \$80; Class D, \$75; Class E, \$70.

**Illinois Increases Salaries.**

The salaries of teachers employed in the public schools of Illinois are steadily increasing according to statistics recently compiled by Superintendent of Public Instruction Francis G. Blair. The average male teacher in ungraded schools received \$6.69 and the average female teacher \$11.90 more salary last year than in 1910.

But, even with the increase, the salaries in the ungraded schools are but \$351.52 and \$315.98 a year for men and women, respectively.

In the graded schools, a steady increase is shown by Mr. Blair. Men teachers in schools of this class last year averaged \$1,088.30 a year, while women teachers made but \$730.76. The year previous the men got \$1,063.40 and the women \$709.26.

Ten years ago, in 1901, men teachers in the same class of graded schools averaged but \$811.50 and women \$586.12 a year. In the ungraded schools the men were paid only \$251.92 and the women \$220.18.

Illinois in 1910 paid in salaries, to a total teaching force, numbering 26,529, the total of

\$11,854,772.41. Last year a total of 29,860 teachers in all the schools drew a total salary of \$18,195,917.72.

The board of education of Seneca Falls, N. Y., pays a minimum salary of \$500 to teachers in the public schools.

Muscatine, Ia. All the teachers have been given an increase in their salaries of \$50 per year.

Boston, Mass. Teachers in the secondary schools have petitioned the school committee for equal pay without regard to sex, and sufficient increases to meet the cost of living. The petition states that no increases have been received for sixteen years.

**SPECIAL STUDIES.**

Rockford, Ill. A ten-weeks' summer course is planned. Sessions will be held from eight to twelve o'clock. It has been begun with the idea of helping pupils who are behind in their work.

Springfield, Ill. Following a recent test in arithmetic in the seventh and eighth grades it has been found that the pupils in public schools have advanced on an average of three grades each since 1846.

The questions in the test were taken from papers removed from the old high school which was razed in 1905. The original test of 1846 was given to seventy-nine pupils and resulted in an average grade of 29.4 per cent. In 1905 the test was given to 245 students, who made an average of 65.5 per cent.

The test applied recently was taken by the pupils of the seventh and eighth grades with no previous preparation. In the former an average of 56.3 was made by 150 pupils. Three pupils had perfect marks.

In the eighth grade, out of a total of eighty pupils, twelve failed to answer only one question.

An average of 63.3 per cent was made by this grade.

Cleveland, O. Twenty playgrounds have been opened by the board of education. Two supervisors are in charge of each playground. It is expected that fully 600,000 will attend before the close of the grounds on August 24th.

Twenty-one vacation schools, an increase of three over last year, have been opened in Chicago. Classes open July first and close August eighth.

Wheeling, W. Va. A six-weeks' summer course in manual training has begun. A course in shorthand and typewriting has also been established. Classes will close July 19th.

Brockton, Mass. Sewing and millinery will be taught first-year high-school girls during the coming year.

Springfield, Ill. Vacation schools have been established in several school buildings this summer. The schools will continue for six weeks and instruction will be given in all the common school subjects.

Detroit, Mich. A summer vacation school of eight weeks has been provided. Sessions will be held from 8:30 to 12:00 o'clock and pupils will be admitted upon presentation of their last certificate. A summer session in industrial subjects has been established to continue for a period of eight weeks. The course is provided for the purpose of giving high-school students and graduates of grammar schools in the city an opportunity to secure credits or to make up work which has been relinquished or unfinished. The studies will include mechanical, business and science subjects and will cover three periods in the schoolroom. Students will be limited to two courses, only one of which will require study outside of class. The plan outlined provides for sufficient rest and recreation during the remainder of the day.



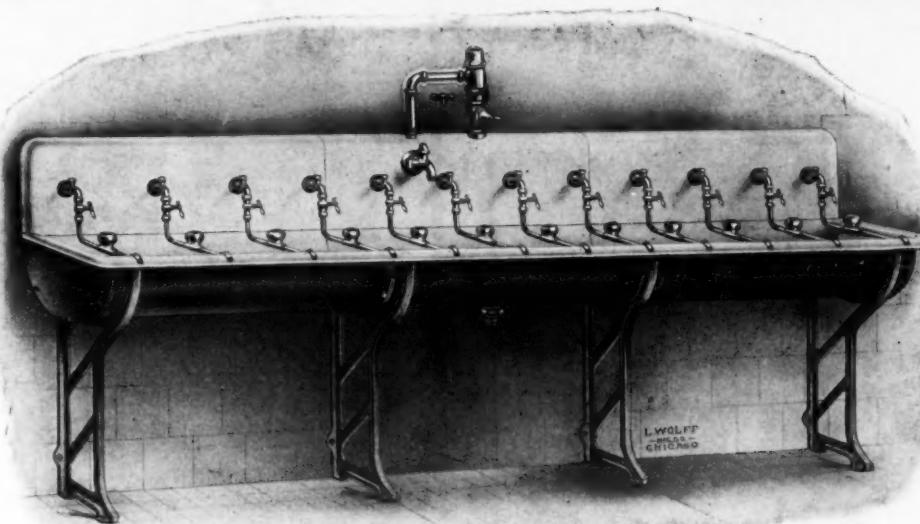


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Buffalo, N. Y.

Dallas, Texas

Salt Lake City, Utah

A committee appointed by the Wisconsin State Teachers' Association to outline a uniform course of study in domestic art and science for the public schools of the Badger state, has submitted a course to domestic science teachers, principals and superintendents for their criticisms and suggestions.

The committee recommends that the work be begun in the fifth grade with two forty-five-minute periods per week; that two ninety-minute periods per week be given in the sixth and seventh grades; that three ninety-minute periods and two forty-five-minute periods per week be given in the first two years of the high-school course; and that two ninety-minute periods and three forty-five-minute periods be allotted to the subject in the last two years. This means practically a full course of study for eight years.

In addition to cooking and sewing, the proposed course includes textiles, dressmaking, house decoration, food study, preservation of foods, adulteration, dietaries, hygiene, sanitation and household management.

The committee which has proposed the course consists of four supervisors and is headed by Emma Conley, Wausau, Wis.

A new course of study has been adopted for the manual training high schools of Philadelphia. It is four years in length (instead of three years, as formerly) and leads up to a diploma which will admit to any recognized college or university. The course is as follows:

Subjects	1st	2d	3d	4th
English	3	3	3	3
Foreign languages	4	4	4	4
History and civics and economics	3	3	3	3
Mathematics	5	5	4	4
Science	4	4	5	5
Manual training	6	6	6	6
Art	4	4	4	4

The numbers set opposite the respective subjects indicate the number of periods of forty-five minutes each per week.

New York, N. Y. Modification of the study

of arithmetic in the elementary schools is proposed by the board of superintendents. Among the changes to be made are a new course for the first four years, which defers the more difficult work until later. Multiplication is deferred six months and bills and decimals are advanced from 4B to the later years. The problems prescribed are to be simplified.

Bridgeton, N. J. The board of education has provided a six-weeks' summer course, beginning July 10th. The course is restricted to those in grammar grades or below, and sessions will be held only in the morning.

Denver, Colo. Backward pupils in two local schools have been given a special reading course under the direction of the public library. The innovation has proved very successful and will probably be extended in September. Books on history, biography and adventure are read.

Lynn, Mass. Domestic science and printing will be introduced in the evening school.

Spokane, Wash. Supt. B. M. Watson has recommended that two manual training departments, one in the grades and another in the high school, be continued during the summer. Mr. Watson believes they will furnish employment for boys during vacation and enable them to secure beneficial instruction without tuition. The plan, as worked out with the assistance of the manual training supervisor, provides for twenty boys in each department, under the supervision of two instructors. The departments are to be open for six hours daily. Useful household articles will be made which will be sold by the students. The proceeds will go toward purchasing material and paying salaries.

Lansing, Mich. An elective course in French has been introduced in the high school, to begin next September. Students taking the course must have had two years of some other language.

The eighth annual report of the New York State Department of Education contains a chapter on "Vocational Schools" by Arthur D. Dean, chief of the Division of Vocational Schools, in which a plan for an extension of

the usefulness of the average high school is outlined. The Education Department believes that such schools now teaching college preparatory, commercial, industrial and home-making subjects can economically and effectively develop courses of instruction along the lines suggested by the syllabus which shall have a well-blended, liberal and vocational training.

### PURCHASE OF SCHOOL SUPPLIES IN NEW YORK CITY.

(Concluded from Page 20)

J. Inspector must see that duplicate ticket is returned to him by driver of truck or wagon delivering coal, properly signed in ink.

K. Great care must be taken to see that signature on ticket is genuine.

L. If inspector is not satisfied with duplicate ticket returned, he must make an immediate investigation and report facts at once to the chief inspector of fuel.

M. Duplicate ticket must, in every instance, accompany the large ticket when same is sent to the chief inspector with the weekly report.

N. Inspector must personally weigh all coal for which he issues a ticket. He must supervise its delivery from the time coal is weighed and inspected by him until it is stored in the bins or cellars of the school buildings or offices.

### INSTRUCTIONS TO JANITORS.

A. Janitor, engineer or representative having charge of coal must see that duplicate and triplicate are presented with every load of coal delivered at school.

B. Each load of coal must be examined as to its condition, quality, etc. Tickets must not be signed until fuel called for has been actually deposited at school.

C. If janitor, engineer or representative has any doubt as to the quantity called for on tickets, he or she must refuse to sign for same, and in the case of coal, is permitted to order it on scale if scale is at school; if not, to any point near the school where same may be weighed. Inspector must also re-measure wood if requested to do so, as janitor, engineer or representative will be held to a strict accountability for all coal and wood delivered at school.

D. Janitor, engineer or representative who receives coal, must indicate on duplicate and triplicate tickets whether the truck was loaded light, heavy or very heavy, when it reached the school.

E. Duplicate ticket for coal must be signed in ink and handed to driver of truck or wagon delivering same.

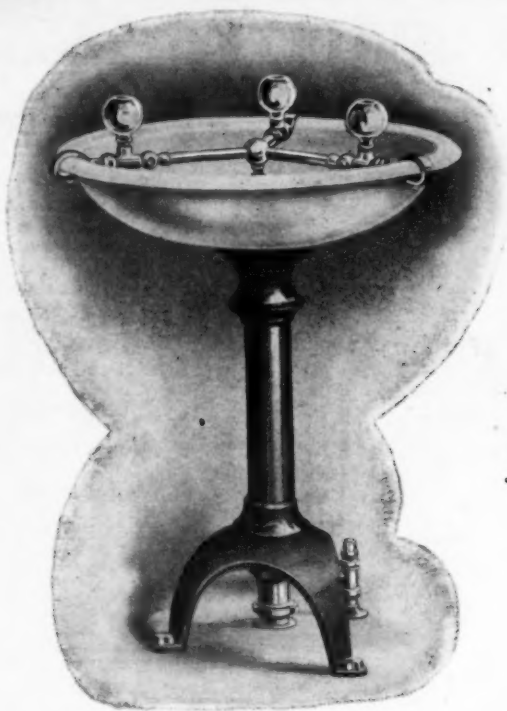
F. When inspector has measured wood, he must hand janitor, engineer or representative duplicate and triplicate tickets. Janitor, engineer or representative, when satisfied that the quantity is correct, must sign both in ink and return duplicate ticket to inspector.

G. Triplicate ticket must be signed in ink and retained by janitor as evidence of the quantity and quality of coal and wood delivered at school.

H. Janitor, engineer or representative must indicate on duplicate and triplicate tickets the condition of coal or wood.



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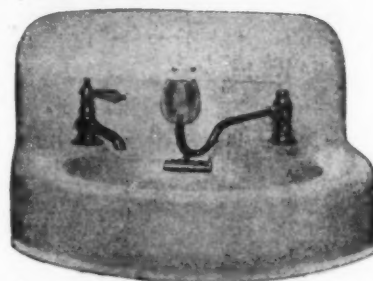
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### VOCATIONAL EDUCATION NOTES.

Vocational guidance, by means of lectures and direct assistance in choosing a calling, is to be offered to the boys enrolled in the public schools of Brockton, Mass. At present, manual training is taught in the upper grades and in the high school, but is deemed insufficient. For the girls, courses in cooking, sewing, domestic science and related subjects are to be offered. Discussing the proposition, Dr. E. C. Frost, a member of the school committee, says:

"Nearly all boys leave school without the slightest idea as to what kind of career they will follow. They, as a result, waste many years. The girls, on the other hand, do not get the right sort of training. They are expected in the public schools to study only along the same lines as their brothers. This has a tendency to make them competitors with men in business. What they need is training for becoming wives and mothers."

A vocational course in which pupils may learn domestic science and homemaking will be a part of the curriculum next year in the South End Girls' High School, Boston. The necessary training in housework, cooking, millinery, dress-making and decorative art will be included in the new course.

The board of school visitors of Hartford, Conn., has recently passed resolutions endorsing the establishment of a department of vocational guidance in the schools and favoring the appointment of a competent man to take charge of the work. The city council has been asked for an appropriation of \$1,100.

Beginning July 29th and continuing for a period of five weeks, the normal courses at the Stout Institute, Menomonie, Wis., will be offered to summer-school students. The authorities in charge are anxious to interest teachers of vocational education. The school is now state property and is under the supervision of the state board of industrial education at Madison.

Somerville, Mass. The school committee has voted to employ women as manual training in-

structors and has also designated a third manual training center.

More than a million dollars from the estate of the late Orlando S. Johnson, a veteran coal operator, who died in New York, in May, will be used to found a manual training school for boys and girls at Scranton, Pa.

A ten-weeks' summer course has been opened in the technical high schools of Cleveland, O.

One hundred and twenty schools in the state of Wisconsin have applied for aid in teaching agriculture. The legislature in 1911 passed a law permitting aid to high schools, where a regular four-year course in agriculture is maintained. Qualified high schools are to be allowed \$250, and an additional \$100 is to be granted if instruction is given in at least three grades below the high school. As a result of the law unusual interest has been aroused.

Chillicothe, Mo. The board has made provisions for a complete business and commercial course in the high school.

Superior, Wis. The board of education has assumed the direction of the new industrial school. A principal has been secured and the remainder of the faculty will be appointed in September.

Indianapolis, Ind. Plans have been made for nine summer schools to continue for a period of five weeks. Sessions will be held from 8:30 to 11:45 a. m., and from 1:30 to 3:00 p. m. Any school which has an insufficient number in attendance will be closed. It is estimated that the schools can be maintained at a cost of \$360 each.

Wichita, Kans. Manual training and domestic science will be established to minimize the evil of early withdrawals from school. Five centers will be provided, one for colored children. The courses are limited to the sixth, seventh and eighth grades in which the largest falling off in numbers occurs. The cost of installing five manual training departments is estimated at \$3,700. Two teachers are to be em-

ployed in each center, one man for manual training and one woman for domestic science and art.

An advisory committee of leading men, connected with manufacturing establishments, has been chosen by the school board of Springfield, Mass., to assist in the conduct of the new boys' trade school. The committee will be expected to visit the school frequently and to keep in touch with all phases of its work. The committee is required under the Massachusetts laws, and is intended to be a check upon both school board and faculty.

Chicago, Ill. Twenty-five girls, employees of State Street department stores, have entered classes in *salesladyship* at the Lucy Flower School. In these classes the girls are taught store arithmetic, English and some information on textiles. They are selected by the managers of the stores and attend two mornings each week, carfare being paid by their employers.

A boys' continuation school has been opened at the Crane Technical High School, Chicago. The first students will be selected from employees of the Crane Company and will be taught drawing, arithmetic and English.

Pottsville, Pa. Mechanical drawing has been introduced in the schools.

Lansing, Mich. An industrial co-operative course will be opened in September. Students will divide their time between the factory and school, alternating each week. The course will include technical instruction and common school studies. Instruction is provided for first-aid treatment in accidents. The students will work in pairs, one remaining at the factory, while the other attends school, thus holding one job between them. It is expected that the course will assist boys who leave school at an early age to earn money before they have received the necessary training which shall fit them for life. The teacher to be employed must possess shop experience and scientific training.



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you must overhaul your school building from basement to garret. Don't forget you need drinking fountains in every school of your city.

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tached to our many varieties of styles and makes, and are ideal for any of our pedestal, range, wall or other fountains.

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New Richmond, Wis. A four-year course in agriculture will be established next year.

Boston, Mass. A course in salesmanship and merchandising will be established in the Dorchester high school in September.

Bellingham, Wash. The state normal school has added departments in woodworking and printing to the course of study. Instruction in these branches will begin in September. It is expected that all the school printing will be done by the students.

Beaver, Pa. The school board has introduced manual training and domestic science in the schools.

Two-year and four-year commercial courses have been prepared by Superintendent Tallman, of Pottsville, Pa., for the local high school. The studies to be offered are as follows:

First Year—English, commercial arithmetic, penmanship, physical geography, elective (choose one), 1, history; 2, algebra.

Second Year—English, bookkeeping, commercial law, elective (continued from first year).

Third Year—English, bookkeeping, typewriting and stenography, commercial geography, elective.

Fourth Year—English, typewriting and stenography, U. S. history and civics, business and office practice, elective.

### TWO-YEAR COURSE.

First Year—English, commercial spelling, penmanship, typewriting and stenography, bookkeeping, commercial law, commercial arithmetic.

Second Year—English, U. S. history and civics, commercial geography, typewriting and stenography, bookkeeping, penmanship, commercial correspondence.

El Centro, Cal. The Central Union High School has undertaken the establishment of a horticultural course for the pupils and others interested in the study. Three hundred and sixty-three varieties of fruit trees, bushes and vines have already been planted. The plants will be

grown with three aims in view, namely, to teach the science of horticulture, to show ways of experimentation and to determine what varieties are best adapted to that section of the country.

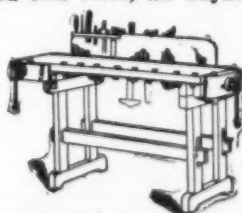
### THE SCHOOLHOUSE AND ITS EQUIPMENT.

(Concluded from Page 22)



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were designed by Gustaf Larsson in 1889. Tops are of maple strips glued. Sizes are standard. Manufactured by Chandler & Barber, Boston.

### COMING CONVENTIONS.

July 2-3-4. American Institute of Instruction at North Conway, N. H.

July 5. Southern Kindergarten Association at Knoxville, Tenn. Marion S. Hanckel, School-field, Va.

July 6-12. National Education Association at Chicago. C. G. Pearse, president, Milwaukee; Irwin Shepard, secretary, Winona, Minn.

July 8-15. Annual Conference of Maine School Superintendents at Castine.

July 15-19. National Commercial Teachers' Federation at Spokane.

July 25-26-27. Illinois County Teachers' Association at De Kalb. William C. Casey, president, Decatur.

Sept. 23-28. Fifteenth International Congress on Hygiene and Demography at Washington, D. C. John S. Fulton, general secretary, Washington, D. C.

Oct. 23-25. Maine Teachers' Association at Portland. L. E. Moulton, Auburn, president.

Oct. 25-26. Northern Illinois Teachers' Association (western section) at Freeport. H. B. Hayden, Rock Island, president.

Oct. 26-28. Southeastern Missouri Teachers' Association at Cape Girardeau. Supt. Louis Theilman, president.

Nov. 6-7-8. Nebraska Superintendents and Principals' Association at Omaha. Dorothea Kolls, Grand Island.

Nov. 25-27. New York State Teachers' Association at Buffalo. P. G. Bugbee, president, Oneonta; Richard A. Searing, secretary, North Tonawanda.

Nov. 28. County Superintendents of Southwest Missouri at Springfield. E. H. Newcomb, county superintendent, Neosho, Mo.

Nov. 28-30. Southern Education Association at Louisville, Ky. W. F. Feagin, Montgomery, Ala., secretary.

Nov. 29-30. Southwestern Indiana Teachers' Association at Evansville. F. S. Morganthaler, Rockport, president.

Nov. 29-30. Southwestern Oklahoma Teachers' Association at Lawton. A. A. Rogers, Frederick, president.

Dec. 26-28. Illinois Teachers' Association at Peoria. J. D. Shoop, assistant superintendent, Chicago, president.

Dec. 26-28. Arkansas Teachers' Association at Little Rock. J. P. Womack, Magnolia, president.



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### ALABAMA.

Mobile—Arch. L. H. McNeill has been selected to prepare plans for high school.

### ARIZONA.

Phoenix—Bids have been received for 3-room school. Jones & Westcott, Archts.

### CALIFORNIA.

Newport Beach—Bids have been received for 4-room school; L. S. Wilkinson, clerk. Carpinteria—School will be erected; \$26,000. Elmonte—Bids have been received for 4-room school on Durfee Ave. and Lexington Rd.; Tuttle & Hopkins, Archts., Los Angeles. Anaheim—Propose erection of 4-room school in Yorba Linda Township; \$7,500; E. R. West, clerk. R. F. D. No. 3. Baldwin Park—Bids have been received for 4-room school; W. R. Johnson, clerk. Middletown—Plans have been prepared for school; \$75,000. Santa Clara—\$60,000, bonds, have been voted for school. Santa Ana—Plans have been prepared for one-story school on South Broadway. Walnut Creek—Contract has been awarded for school; \$14,000. Oakland—Arch. John Donovan has plans for Dewey and College Avenue schools; \$99,000 each. Sawtelle—Propose erection of two schools; \$20,000.

### COLORADO.

Colorado Springs—Archts. McLaren & Thomas have plans for high school. Fruita—Propose erection of grammar school; \$40,000.

### CONNECTICUT.

Meriden—Archts. Guilbert & Betelle, Newark, N. J., have plans for 3-story school; \$200,000. Watertown—Bids have been received for 4-story school; Cram, Goodhue & Ferguson, Archts., New York, N. Y. Fairfield—Arch. W. R. Briggs, Bridgeport, has plans for 2-story school.

### DELAWARE.

Wilmington—Bids have been received for school; Wm. J. Robinson, chairman.

### FLORIDA.

Bradentown—Bids have been received for high school; L. L. Hine, superintendent. Palmetto—Bids have been received for high school. Sarasota—High school will be erected; \$11,000. Terra Ceia—School will be erected. Palma Sola—School will be erected.

### GEORGIA.

Cochran—Archts. Sayre & Baldwin, Anderson, S. C., have plans for school; \$20,000. Savannah—Archts. Wallin & Young have plans for 2-story school; \$50,000. Bainbridge—School will be erected; \$50,000. Columbus—Contract has been awarded for Sixteenth Street school; \$15,000. Marietta—\$20,000, bonds, have been voted for school.

### IDAHO.

Kendrick—\$15,000, bonds, have been voted for school.

### ILLINOIS.

Chicago—Archts. Murphy & Cloyes have plans for St. Gertrude's School. Pekin—Archts. Hewitt & Emerson, Peoria, have plans for high and grade schools; \$65,000 and \$50,000, respectively. Rock Island—Arch. C. D. McLane has plans for 3-story school, St. Joseph R. C. Church; \$50,000. Magnolia—Arch. N. K. Aldrich, Galesburg, has plans for school; \$20,000. Chicago—

Arch. A. G. Lund has plans for school; \$12,000. New-  
man—Arch. J. McCoy, Danville, has plans for 2-story  
high school. Godfrey—Arch. L. Pfeifferberger, Alton,  
has plans for 2-story school, Twp. 119. Herrin—Con-  
template erection of 2-story high school; \$40,000; R. L.  
Adams, secretary. Chicago—Archts. Worthman & Stein-  
bach have plans for school, St. Paul's Evangelical Luth-  
eran Church; Rev. A. Bartling, pastor. Springfield—  
Arch. G. Helmle has plans for two schools; \$75,000 each;  
also plan for school, St. Agnes Catholic Church; \$50,000.  
Easton—Archts. Deal & Ginzel, Lincoln, have plans for  
2-story school; \$12,000. Boody—Arch. M. G. Patter-  
son, Decatur, has plans for school; \$10,000. Mt. Pulaski  
—Bids have been received for township high school; Deal  
& Ginzel, architects, Lincoln. Marion—Bids have been  
received for school; Spencer & Temple, architects, Cham-  
paign. Elgin—\$7,000, bonds, have been voted for  
school; G. W. Guptail, president. Milford—Proposals  
have been received for high school; Spencer & Temple,  
architects, Champaign. Panola—Bids have been received  
for school; H. G. Crawford, chairman. Washington—  
Bids have been received for school, John Wenger, clerk.  
Virginia—Contract has been awarded for school; \$30,-  
000. Towanda—\$12,000, bonds, have been voted for  
school. Cowden—Propose erection of high school; \$15,-  
000. Argenta—High school will be erected; \$15,000.  
Danville—Bids have been received for high school; Spen-  
cer & Temple, architects, Champaign.

### INDIANA.

Indianapolis—Arch. C. O. Martindale has plans for  
school No. 3. Indianapolis—Bids have been received for  
8-room school at McClainsville. Edinburg—Archts. Dun-  
lap & Van Arman, Indianapolis, have plans for high  
school; \$40,000. Greentown—Bids have been received  
for 2-story high school; \$35,000; Chas. E. Disbro, trustee.  
Freelandville—Proposals have been received for  
school; J. W. Gaddis, architect, Vincennes. Washington  
—Arch. M. Johnson, Brazil, has plans for high school;  
\$60,000. Indianapolis—Bids have been received for  
school at Roosevelt Avenue and Olney Street; R. P. Dag-  
get & Co., architects. Ft. Wayne—Arch. P. Dederichs,  
Detroit, Mich., has plans for school, St. Peter's R. C.  
Church; will receive figures July 15, 1912. Ingalls—Arch.  
G. W. Gordon, Greenfield, has plans for 4-room school;  
\$10,000. Hartsville—Bids have been received for 4-room  
school; G. Rominger, secretary. Madison—Archts. H. L.  
Bass & Co., Indianapolis, have plans for 2-story school.  
Greensburg—Arch. Herbert Foltz, Indianapolis, has  
plans for high school; \$60,000. Rensselaer—Arch. I.  
W. Kelley, Chicago Heights, Ill., has plans for high  
school; \$27,000. Evansville—Bids have been received  
for school No. 6; C. Shopbell & Co., architects. Elber-  
feld—Archts. C. Shopbell & Co., Evansville, have plans  
for 2-story school. North Liberty—Bids have been re-  
ceived for 2-story school; C. E. Kendrick, architect,  
Gary. Akron—Archts. Mahurin & Mahurin, Ft. Wayne,  
have plans for 2-story school; \$20,000. Switz City—  
Archts. Padget & Dickinson, Terre Haute, have plans for  
2-story high school; \$20,000. La Porte—Bids have been  
received for school; L. A. Haverly, secretary. Linton—  
Contract has been awarded for two schools; \$7,500 each.  
Campbellsburg—Bids have been received for school;  
\$8,900; James C. Brown, secretary.

### IOWA.

Clarion—Arch. W. F. Keefe, St. Paul, Minn., has  
plans for Catholic parochial school. Iowa City—Arch.  
E. I. Carrothers has plans for manual training high  
school. Lorimer—Arch. A. O. Houghland, Chariton, has  
plans for 2-story school; \$20,000. Orient—Propose erec-  
tion of high school; \$10,000. Green Island—Bids have  
been received for school; J. H. Chick, secretary. Har-  
court—Arch. J. W. Bradford, Ft. Dodge, has plans for  
4-room school. Manson—Bids have been received for  
school; Geo. W. Reynolds, secretary. Oakland—Bids  
have been received for school; N. W. Kents, clerk. Ot-  
tumwa—Bids have been received for 2-story school at  
Wilson, Ward and Ransom Streets. Milford—\$8,000,  
bonds, have been voted for school. Waterloo—Propose  
erection of 8-room school at East Waterloo; \$20,000.  
Farley—Arch. Andrew Roth, La Crosse, Wis., has plans  
for school, St. Joseph Catholic Church. Algona—Con-



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tract has been awarded for school; \$25,000. Castana—  
Bids have been received for school; W. J. Donlin, clerk.  
Clear Lake—Contract has been awarded for school. De-  
fiance—Bids have been received for school; John C.  
Woodward, Architect, Council Bluffs. Fayette—Bids have  
been received for school; Ira Homewood, clerk. Han-  
lonton—\$8,000, bonds, have been voted for school. Wau-  
kee—Bids have been received for school; Elmer Robin-  
son, clerk. Clearfield—Bids have been received for school;  
Thos. Bender, clerk. Lynnville—Archts. Proudfoot, Bird  
& Rawson, Des Moines, have plans for school. Tabor—  
Bids have been received for school in Green Twp.; W.  
H. Stubbs, secretary. Wyman—\$15,000, bonds, have  
been voted for school. Mt. Ayr—Arch. S. B. Sinclair,  
Oskaloosa, has plans for 2-story school; \$45,000. Green-  
field—Proposals have been received for school, sub-dis-  
trict No. 4; R. H. McCrea, secretary. Mt. Ayr—Bids  
will be received until July 6, 1912, for grade and high  
schools; \$42,000; Trunk & Gordon, architects, St. Je-  
seph, Mo.

### KANSAS.

Osage City—Arch. John F. Stanton, Topeka, has plans  
for 2-story high school; \$25,000. Wakeeney—Archts.  
John C. Holland & Son, Topeka, have plans for high  
school; \$25,000. Great Bend—Archts. Owen & Payson,  
Kansas City, Mo., have plans for 2-story school;  
\$20,000. Rosedale—Archts. Owen & Payson, Kansas  
City, Mo., are preparing plans for 2-story school;  
\$17,000. Webster—Arch. E. J. Waters, Manhattan,  
has plans for 1-story school; \$12,000. Rock Creek—  
Bids have been received for grade and high school; \$10,-  
000; T. W. Williamson, architect, Topeka. Newton—  
Archts. Keene & Simpson, Kansas City, Mo., have plans  
for 3-story high school. Atchison—Archts. Saylor &  
Seddon, Kansas City, Mo., have plans for Washington  
school; \$50,000. Liebenthal—Arch. C. A. Smith, Sa-  
lina, has plans for Catholic parochial school; \$8,000;  
Rev. R. Stoltrier, pastor. Talmage—Arch. C. A. Smith,  
Salina, has plans for 2-story school. Grenola—Arch.  
C. W. Terry, Wichita, has plans for 2-story school; \$11,-  
000. Willis—Bids have been received for school; V.  
Bauer & Sons, architects, Horton. Valley Center—Con-  
template the erection of 2-story school; \$12,000; W. B.  
Adamson, clerk. Mt. Hope—Contemplate the erection of  
school; \$8,000; E. W. Jewell, clerk. Arlington—Archts.  
Mann & Gerow, Hutchinson, have plans for school; \$15,-  
000. Haviland—Arch. M. P. Nielson, Topeka, has  
plans for 2-story school. Pittsburg—Bids have been re-  
ceived for 4-room school; E. J. Munn, architect. Em-  
poria—High school will be erected; \$135,000; Miss Mae  
N. Clark, clerk. Mackaville—\$15,000, bonds, have been  
voted for school. Tribune—Bids have been received for  
school; Harold C. Smith, clerk. Lucas—Contract has  
been awarded for school; \$16,000.

### KENTUCKY.

Louisville—Arch. Val P. Collins has plans for 2-  
story school. Browns Valley—Arch. O. W. Kimberlin,  
Owensboro, has plans for 2-story parochial school; Rev.  
Aloysius G. Meyering. Cadiz—School will be erected;  
\$20,000.

### LOUISIANA.

Shreveport—Bids have been received for 10-room  
school. Edw. F. Neild, architect. Patterson—Proposals  
have been received for high school; Stevens & Nelson  
Co., architects, New Orleans. Leesville—Archts. Stev-  
ens & Nelson Co., New Orleans, have plans for school.  
Lockport—Contract has been awarded for school.

### MARYLAND.

Centerville—Arch. W. D. Brinkley has plans for 2-  
story school; \$17,000. Woodwardville—School will be  
erected. Baltimore—Proposals have been received for  
School No. 6 on S. Ann Street; Jas. H. Preston, presi-  
dent Board of Awards. East New Market—Proposals  
have been received for high school; S. J. Smith, secre-  
tary.

### MASSACHUSETTS.

Boston—Arch. J. A. Schweinfurth has plans for High  
School of Practical Arts; \$400,000. Lakeville—Arch.  
Wilson G. Harlow, Middleboro, has plans for 4-room  
school; \$7,000. Lexington—Archts. Brainerd & Leeds,  
Boston, have plans for 2-story school; \$70,000. Lynn

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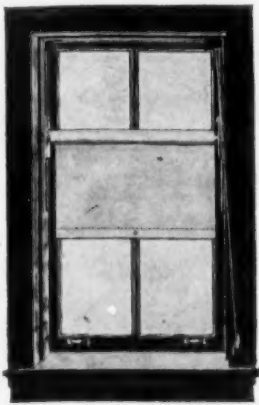
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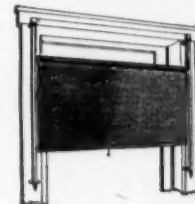
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—Arch. Ulman R. Hunt has plans for 2-story school. Marblehead—Arch. Wm. H. Quiner, Jr., has plans for high school; \$85,000. Quincy—Arch. Albert H. Wright, Boston, has plans for 2-story school; \$80,000.

#### MICHIGAN.

Petoskey—Arch. John D. Chubb, Chicago, Ill., has plans for 3-story high school \$65,000. St. Joseph—Arch. J. C. Schwerdt has plans for 2-story school, German Lutheran Church; \$12,000. Muskegon—Arch. E. Vanderwest has plans for 2-story school, St. Jean Baptiste Catholic Church, Harbor Springs—Arch. E. H. Meade has plans for 2-story school, Crystal Falls—Arch. Derrick Hubert, Menominee, has plans for school. Holland—Arch. John D. Chubb, Chicago, Ill., has plans for high school; \$75,000. Moscow—Bids have been received for 2-story school; W. O. Moreck, architect, Indianapolis, Ind. Detroit—Arch. Malcomson & Higginsbotham have plans for Clay school; \$70,000. Detroit—Arch. Van Leyen & Schilling have plans for school, St. Charles R. C. Church, Saginaw—Arch. Wm. B. Itner, St. Louis, Mo., has plans for 2-story school; \$100,000. Hudson—Arch. E. A. Bowd, Lansing, has plans for high school; \$50,000. Manistee—Arch. C. G. Vierheilig, Grand Rapids, has plans for school, Polish Catholic Church, Chasell—Bids have been received for school; Maass Bros., architects, Houghton. Berrien Springs—\$15,000, bonds, have been voted for school; Geo. Kephart, secretary. West Branch—Arch. Cowles & Mutscheller, Saginaw, have plans for 2-story high school; \$25,000. Boyne City—Arch. Clark & Munger, Bay City, have plans for 2-story school. Flint—Proposals have been received for 12-room school. Malcomson & Higginsbotham, architects, Detroit. Pontiac—Arch. Perkins, Fellows & Hamilton, Chicago, Ill., have plans for high school; \$175,000. Millersburg—Arch. Thos. Ernest White, Lansing, has plans for school; \$7,000.

#### MINNESOTA.

Caledonia—Contract has been awarded for school, St. Peter's Catholic Church; \$17,000. Crookston—School will be erected, Sisters of St. Joseph; \$60,000. St. Louis Park—Contract has been awarded for school; F. E. Halden, architect. Tracy—Arch. Alban & Hausler, St. Paul, are preparing plans for high school. Ely—School will be erected at Fall Lake. Crookston—Arch. Bert D. Keck has plans for 2-story high school; \$150,000. Gheen—Propose erection of school. Glenville—High school will be erected. Virginia—Bids have been received for two schools; V. J. Price, architect, Duluth. Hutchinson—Arch. F. W. Kinney, Minneapolis, has plans for 2-story high school; \$50,000. Montgomery—Arch. H. C. Gerlach, Mankato, has plans for school, St. Agnes Church; \$15,000. Rochester—Arch. Albert Schippel, Mankato, has plans for 6-room school; \$12,000. Dawson—Contract has been awarded for school; \$10,000. Duluth—Bids have been received for 2-room school; V. J. Price, architect. Glyndon—Arch. Haxby & Gillespie, Fargo, N. D., have plans for school; \$25,000. LeRoy—Bids have been received for high school; L. M. Daily, secretary. McIntosh—Contract has been awarded for school; \$20,000. Winton—Bids have been received for school;

F. L. Young & Co., architects, Duluth. St. Paul—Arch. E. L. Masqueray has plans for school, Immaculate Conception Church; \$80,000. Garden City—Arch. Kirby T. Snyder, Minneapolis, has plans for 2-story school. Lonsdale—Arch. E. J. Donahue, St. Paul, has plans for parochial school; Rev. J. Bouska, pastor. Benson—\$30,000, bonds, have been voted for school. Hancock—Bids have been received for school; Fremont D. Orff, architect, Minneapolis. Silver Lake—Bids have been received for 2-room school; C. H. Parsons, architect, Minneapolis. Middle River—School will be erected. Rushmore—Bids have been received for school; F. D. Orff, architect, Minneapolis. Tyler—Contract has been awarded for school.

#### MISSISSIPPI.

Brooklyn—Contract has been awarded for three agricultural high schools.

#### MISSOURI.

Carthage—Arch. J. H. Felt & Co., Kansas City, have plans for high school; \$80,000. Princeton—Arch. J. H. Felt & Co., Kansas City, have plans for 2-story high school; \$20,000. Whiteside—Bids have been received for 2-room school; Wm. A. Magruder, secretary. Kansas City—Arch. C. A. Smith has plans for seven schools. Sheldon—Arch. Jos. A. Prather, Carthage, has plans for 2-story school; \$10,000. Herculaneum—Arch. H. H. Hohenschild, St. Louis, has plans for 8-room school. Carthage—Contemplate erection of 2-room school; J. F. Wallis, president. Lowry City—Arch. W. F. Schrage, Kansas City, has plans for 2-story school; \$10,000. Wayneville—Arch. Roth & Study, St. Louis, have plans for 2-story school. Odessa—Arch. J. H. Felt & Co., Kansas City, have plans for 2-story school; \$20,000. St. Louis—Arch. Wm. B. Itner has plans for Wm. Glasgow, Jr., school; \$224,000. Columbia—Contract has been awarded for school.

#### MONTANA.

Silverbow—Bids have been received for school district No. 3; \$105,000; Frank Reilly, clerk. Shelby—\$20,000, bonds, have been voted for school. Stanford—Contract has been awarded for school; \$20,000. Grant—Bids have been received for school; W. C. Templin, clerk. Townsend—Contract has been awarded for school. Red Lodge—Arch. C. C. Oehme, Billings, has been selected to prepare plans for high school; \$30,000.

#### NEBRASKA.

Central City—Arch. Berlinghof & Davis, Lincoln, have plans for high and grade schools; \$35,000 and \$15,000, respectively. Lincoln—Arch. Berlinghof & Davis have plans for high school, Bancroft School and ward school; \$350,000. Hastings—Arch. C. W. Way Co., have plans for 2-story school; \$15,000. University Place—Arch. A. H. Dyer & Co., Fremont, have plans for 2-story high school; \$50,000. Fremont—Propose erection of high school; \$100,000. Steele City—Propose erection of 2-story school; \$10,000. Columbus—Plans have been prepared for 2-story school, Third Ward; \$25,000. Humphrey—Contract has been awarded for school. Dodge—Arch. J. H. Felt & Co., Kansas City, Mo., have plans for 2-story school; \$20,000. Ord—Propose erection of school.

#### NEW HAMPSHIRE.

Dover—Arch. T. G. O'Connell, Boston, Mass., has plans for Catholic parochial school; Rev. Frank Reilly, pastor.

#### NEW JERSEY.

Vineland—Arch. Moffett & Stewart, Camden, have plans for 2-story school; \$20,000. Linden—Arch. C. Godfrey Poggi, Elizabeth, has plans for 1-story school; \$30,000. Cliffwood—Arch. J. M. Pierson & Son, Amboy, have plans for 2-story school; \$9,000. Asbury Park—Two schools will be erected. Montclair—Arch. James Gamble Rogers, New York, has plans for 3-story school; \$100,000. Hanover—Bids have been received for 1-story school; \$7,000; W. F. Pierson, architect, New York. N. Y. Hilton—Arch. D'Oench & Yost, New York City, have plans for 2-story school; \$65,000. Athenia—Bids have been received for 2-story school; \$22,000; H. T. Stephens, architect, Paterson. Dunellen—Propose erection of school; \$50,000. West Orange—\$55,000 bond issue has been authorized by the board of education.

#### NEW YORK.

Gates—Arch. McCord & Ives, Rochester, have plans for 2-story school; \$25,000. Binghamton—Arch. C. E. Vosbury has been selected to prepare plans for school. Manlius—Arch. Taber & Baxter, Syracuse, have plans for St. John's school. Sonyea—Proposals have been received for school, Craig Colony for Epileptics; Percy L. Lang, president Board of Managers. Lestershire—Propose erection of school. Endicott—School will be erected; \$60,000. New York—Arch. N. Serracino has plans for 5-story school, St. Ann's Academy. Schenectady—Propose erection of two schools; W. Thomas Wooley, city engineer. Cobleskill—Arch. Wm. T. Towner, New York City, has plans for 2-story school; \$65,000. Tivoli—Arch. Wm. T. Towner, New York City, has plans for 2-story school; \$21,000. Lackawanna—Arch. Fred E. Ladd has plans for school. New Lebanon—Bids have been received for school; Fuller & Robinson Co., architects, Albany. Brooklyn—Bids have been received for Bay Ridge high school. White Plains—Arch. Wm. T. Towner, New York City, has plans for 10-room school; \$65,000. Yonkers—Bids have been received for 8-story school; Arch. C. C. Chipman, New York. Watertown—Arch. Cram, Goodhue & Ferguson, New York, have plans for school; \$100,000. Pelham—Arch. G. C. Fletcher, New York, has plans for 2-story school; \$25,000. Mt. Vernon—Arch. Starrett & Van Vleck, New York, have plans for high school; \$150,000. Buffalo—Arch. H. L. Beck has plans for school No. 32. Lockport—Arch. Wm. N. Smith, New York, has plans for Walnut Street school. New Rochelle—School will be erected in Stephenson Park. Poughkeepsie—High school will be erected; \$250,000. Belfast—School will be erected; \$20,000.

#### NORTH DAKOTA.

Hankinson—Bids have been received for school in Greendale School District. Lisbon—Contract has been awarded for school. Barney—Propose erection of school. Rhame—Contract has been awarded for school; \$10,000. Ryder—Bids have been received for school. Ambrose—\$13,000, bonds, have been voted for school. La



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### Additional Wants

Moure—Bids have been received for school; F. W. Rasmussen, architect. Chaffee—Bids have been received for school; Samuel F. Crabbe, architect. Engleval—Bids have been received for two schools; E. H. Howell, clerk. Minot—Bids have been received for school; D. C. Hart, clerk. Bismarck—\$10,000, bonds, have been voted for high school.

#### OHIO.

Cincinnati—Propose erection of 3-story school, Sisters of Santa Maria Institute; \$50,000. East Liberty—Arch. Chas. M. Denman, Columbus, has plans for two schools; \$30,000. Massillon—Arch. Vernon Redding, Mansfield, has plans for 3-story high school; \$100,000. New Philadelphia—Arch. F. L. Packard, Columbus, has plans for 2-story high school; \$100,000. Akron—Arch. Wm. P. Ginther has plans for school, Sacred Heart Academy; \$40,000. Marietta—Two-room school will be erected; W. A. Decker, architect. Hayesville—Bids have been received for school; Stribbling & Lum, architects, Columbus. St. Clairsville—Propose erection of two schools; \$60,000. Mt. Vernon—Four-room school will be erected; L. E. Rawlinson, clerk. Akron—Arch. Griffith & Fair, Ft. Wayne, Ind., have plans for 2-story school; \$20,000. Cleveland—Arch. F. S. Barnum has plans for eleven schools. Huntsville—Arch. F. L. Packard, Columbus, has plans for 2-story school; \$50,000. Ironton—Arch. J. R. Gieske, Ceredo, W. Va., has plans for 2-story school. Bettsville—Propose erection of school; \$12,000. Good Hope—Proposals have been received for 8-room high school; W. F. Black, clerk. Tiffin—Arch. E. H. Dornette, Cincinnati, has plans for 2-story school; \$50,000. Sandusky—High school will be erected; \$250,000; Lee Keller, clerk. Delaware—Arch. Marriott, Allen & Hall, Columbus, have plans for 1-room school. Youngstown—Arch. Kling & Zenk are preparing plans for 2-story school; \$30,000. Tiffin—Arch. F. L. Packard, Columbus, has plans for 2-story school; \$40,000. Monclova—Arch. Huber & Gamble, Toledo, have plans for 4-room school. Lockland—Arch. Bausmith & Drainie, Cincinnati, have plans for 2-story school; \$150,000. Terrace Park—Proposals have been received for school on Elm Avenue; Jas. L. Chapman, architect, Cincinnati. Kyger—Bids have been received for 2-room school; C. A. Rife, clerk. Columbus—Arch. D. Riebel & Sons, have plans for school, Holy Family Church; \$50,000. Marysville—Arch. F. L. Packard, Columbus, has plans for high and grade schools; \$100,000. Yorkshire—Arch. C. F. Bowdle, Piqua, has plans for 2-room school. East Liverpool—Arch. C. M. Metsch has plans for 2-story school; \$10,000. Bowling Green—Arch. Howard & Merriam, Columbus, have plans for normal school; \$130,000. Cincinnati—Arch. Hunt & Reiter, Norwood, have plans for 2-story school at Kennedy Heights; \$35,000.

#### OKLAHOMA.

Vinita—Bids have been received for school district No. 71; W. B. Leib, clerk. Muskogee—Arch. Wilder & Wight, Kansas City, Mo., have plans for Central high school; \$100,000. Keota—Bids have been received for high school; \$25,000; architects, C. E. Hair & Co., Oklahoma City. Leedey—Arch. C. E. Hair & Co., Oklahoma City, have plans for high school; \$18,000. Cache—Arch. C. E. Hair & Co., Oklahoma City, have plans for 2-story high school; \$15,000. Mountain Park—Arch. C. E. Hair & Co., Oklahoma City, have plans for 2-story high school; \$14,500. Cement—Arch. C. E. Hair & Co., Oklahoma City, have plans for high school; \$12,000.

#### OREGON.

Hillsboro—Arch. Newton C. Gauntt, Portland, has been selected to prepare plans for school. Kenville—Bids have been received for school in District No. 51; John Sijota, clerk. Portland—Bids have been received for Failing School; \$200,000.

#### PENNSYLVANIA.

Coatesville—Arch. H. L. Reinhold, Philadelphia, has plans for 3-story school; \$75,000. Jessup—Arch. E. Langley, Scranton, has plans for 4-room school. White Haven—Arch. Reilly & Schroeder, Wilkesbarre, have plans for 2-story school; \$30,000. Shickshinny—Arch. H. A. Meier, Wilkesbarre, has plans for 3-story school; \$30,000. Harleysville—Bids have been received for 1-story school; \$4,000; Jerome Landes, architect, Souderston. Courtville—Arch. A. J. Lathrop & Co., Wilkesbarre, have plans for 2-story school. Frackville—Proposals have been received for high school; Frank X. Reilly, architect, Pottsville. Plymouth—Arch. Alfred Freeman has plans for school; \$30,000. Tarentum—Arch. Ira F. Cuthall has plans for 2-story school; \$50,000. Ferndale—Bids have been received for 4-room school; C. D. Miller, secretary, R. F. D. No. 4, Johnstown, Pa. Blairsville—Arch. C. C. & A. L. Thayer, New Castle, have plans for school; \$65,000. Carmichael—Arch. Henry K. Coffroth, Waynesburg, has plans for 4-room school; \$5,000. Shenandoah—Arch. F. X. Reilly, Pottsville, has been selected to prepare plans for 2-story school; \$15,000. Shippingport—Proposals have been received for 2-room school; Wm. R. Hayward, president. Beech Creek—Bids have been received for school at Fairpoint; W. H. Orner, secretary. New Castle—School will be erected at Wurtemburg; T. A. Hines, secretary. Lamberton—Bids have been received for school; F. B. Loucks, secretary. Campbelltown—Bids have been received for school; Hower & Mowere, architects, Lebanon. Johnstown—Bids have been received for school; D. F. Rager, president. Pittsburgh—Arch. Francis M. Miller, Wilkesburg, has plans for 4-room school. Rummel—Bids have been received for 4-room school; John T. Simpson, architect, Newark, N. J. Export—Bids have been received for 10-room school; W. M. Berlin, secretary. East McKeesport—Proposals have been received for school; S. C. Richard & Co., architects, Braddock. Ebervale—Bids have been received for 2-room school; John Clemens, Jr., secretary. Wilkesburg—Arch. John T. Comes, Pittsburgh, has plans for 2-story school, St. James R. C. Church; \$40,000. Charleroi—Arch. A. P. Cooper, Uniontown, has plans for school on Crest Avenue and Sixth Street. Linglestown—Propose erection of school. Somerset—High school will be erected; \$20,000. Hampton—\$30,000, bonds, have been voted for school. Delta—\$12,000, bonds, have been voted for school. California—Contract has been awarded for school. West Elizabeth—\$14,000, bonds, have been voted for school. Edinburg—Arch. W. G. Eckles, New Castle, has plans for school. Chester—\$80,000, bonds, have been voted for Franklin Street grammar school.

#### SOUTH CAROLINA.

White Stone—Propose erection of school. Summerville—\$15,000, bonds, have been voted for school district No. 18. Columbia—School will be erected on Elmwood Avenue.

#### SOUTH DAKOTA.

Woonsocket—Arch. W. W. Beach, Sioux City, Ia., has plans for 2-story school; \$26,000. Chancellor—Bids

have been received for 4-room school; A. N. Berens, clerk. Rapid City—\$40,000, bonds, have been voted for high school. Alpena—Contract has been awarded for school; \$14,000; F. C. W. Kuehn, architect. Dallas—Bids have been received for three schools; J. J. Ruetter, clerk. Lennox—Bids have been received for school; Geo. Isenruth, architect, Huron.

#### TENNESSEE.

Daisy—Proposals have been received for school; Adams & Alsop, architects, Chattanooga. Tyner—Bids have been received for 4-room grammar school at Walnut Grove; Huntington & Sears, architects, Chattanooga. Bids have been received for 2-room grammar school at Eastdale; Huntington & Sears, architects, Johnson City. Propose erection of high school; \$55,000. Memphis—Contract has been awarded for negro school; \$36,000. Arlington—Contract has been awarded for 8-room school; \$25,000.

#### TEXAS.

Garland—Bids have been received for 2-story school; H. A. Overbeck, architect, Dallas. Laredo—Bids have been received for school; L. J. Christen, superintendent. Cross Plains—Contract has been awarded for school; \$15,000. Jourdan—Bids have been received for school; Page & Bro., architects, Austin. Lockhart—Propose erection of school; \$6,000. Taylor—Arch. Endress & Walsh, Austin, have plans for school; \$13,500. Hondo—\$10,000, bonds, have been voted for school.

#### VIRGINIA.

Lynchburg—Proposals have been received for 12-room school; Heard & Cardwell, architects. Colonial Beach—Bids have been received for high school; R. Regan, architect. Prince George—Bids have been received for school; Chas. M. Robinson, Inc., architects.

#### WASHINGTON.

Tacoma—Arch. Heaths. Heath & Gove have plans for Central School; \$150,000. Coulee City—Arch. H. M. Keeney, Spokane, is preparing plans for school; \$18,000. Riverside—Bids have been received for 2-story school; H. T. Jones, clerk. Seattle—Two schools will be erected at Alki Point and Ft. Lawton; \$65,000 each. Kelso—Contract has been awarded for West Side School and South Side School. Everett—Bids have been received for 2-room school; M. Cameron, clerk. Chattaroy—Four-room school will be erected.

#### WEST VIRGINIA.

Clendenin—Arch. A. G. Higginbotham, Charleston, has plans for 2-story high school; \$20,000. Elkins—Arch. A. C. Lyons, Fairmount, has plans for 3-story high school; \$100,000. Shinnston—Propose erection of 2-story school; \$30,000; R. J. Rice, secretary. Mannington—Arch. Edw. B. Franzheim has plans for 2-story school.

#### WISCONSIN.


Brantwood—Bids have been received for 3-room school, District No. 2; Alex. Sandquist, clerk. Green Bay—Bids have been received for 4-room grade school; Hubert & Anderson, architects. Stockbridge—Proposals have been received for school, District No. 1; Geo. Brown, clerk. Madison—\$60,000, bonds, have been voted for school. North Milwaukee—Proposals have been received for 4-room school; Theo. A. Waech, district clerk. New London—Arch. E. Brielmaier & Sons Co., Milwaukee, have plans for parochial school; Rev. J. Kaster, pastor; \$25,000. Rhinelander—Proposals have been received for high school; Gust Swendberg, secretary. Friendship—Contemplate the erection of high school; \$10,000.



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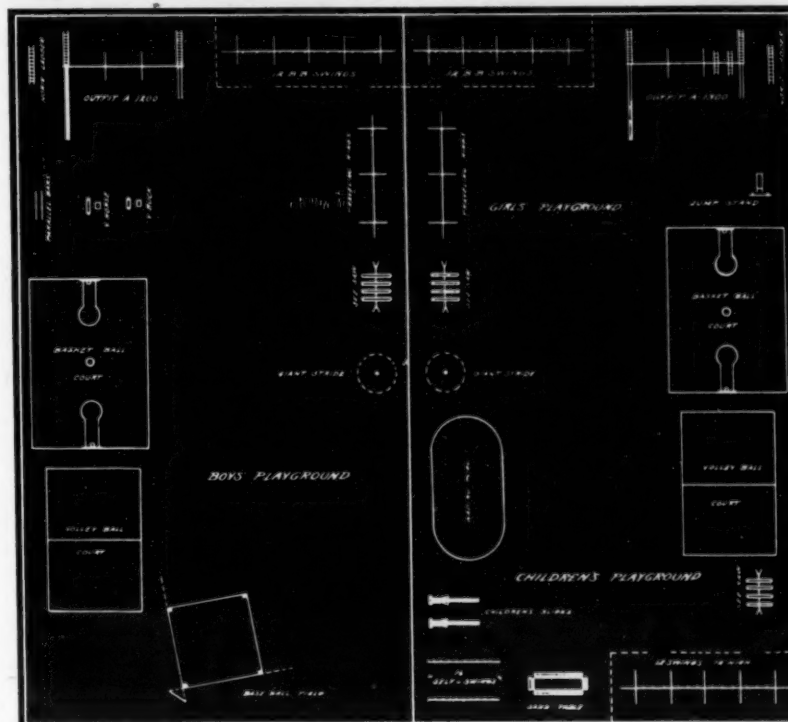


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desk which would permit freedom of action and yet compel a natural posture, the problem would be solved.

#### Adjustability and Adaptability.

The slope of the desk and its height is the most important thing. Its slope must be capable of change when desired. We may not be able to have individual desks and seats, but we already have adjustable desks, and I see no reason why we should not have desks wholly adjustable. That is, desks whose tops may be slid back toward the child when desired, or tilted and otherwise arranged to suit each case. The desk must serve as book-rack, writing-table, and rest for the arms, and only a tilted desk top will conform to all these uses.

Such a desk as this would not only greatly obviate the danger of spinal trouble, but it would also tend to lessen eye diseases in the schools. As the child grows older, his bodily defects grow fewer, contrary to the general opinion, with the exception of defective vision; this alone increases slowly but steadily with the years. The tilting desk-lid and "slidable" desk would greatly remedy this, as was proved long ago at the English and Classical School of Providence, where half the lid was hinged for use as a book-rack.

So, you see, the argument against the straight line is but Nature's argument in favor of the line of least resistance. She intends a tree to grow straight, perhaps, and its beauty lies in the fact that it does not grow straight. It is the ability to yield slightly that betrays power, whether it be in Toledo steel or in the will of man. Let the symmetry of our straight-line schoolrooms yield a trifle, let us have less uni-

formity in order that we may have less deformity!

I do not believe that such a desk as described has yet been invented. It would be a tremendous concession to the restlessness of children; but if we were to invent fewer useless things for grown-ups and more useful things for children, we would get on faster. A desk with pivoted or sliding top would meet them half-way, for they would place it in a normal position instead of placing themselves in abnormal positions. You may very well laugh at it as utterly impracticable, but you cannot very well deny that it is utterly logical.

#### THE SELECTING OF EQUIPMENT FOR AND THE PLANNING SCHOOL SHOPS.

(Concluded from Page 15)

should not be tolerated under any circumstances. Second method—If your teacher is honest but incompetent, and you must retain him for financial reasons, then go to some old experienced shop teacher and give him the job of laying out your shops and drawing up the specifications for the equipment. Most of the teachers are not so well paid but that they will be glad to do the work for a small stipend.

In closing, there is just one thing more that I must say. It is called forth by this statement. "We are just starting the work in our school and cannot afford to pay more than \$900 or \$1,000 this year, in fact it may be several years before we will be able to pay more." Do you School Authorities catch what this means? Do you realize that at this most critical period, at the very time when the ripest experience is most needed, that the time when the man who can command the highest salary will be the economical one, at the time when the work should be done just right, is the very time when the poor

or inexperienced teacher is hired? Do you realize that it means that an inferior man plans a course that rarely ever comes up to the expectations of the people, or what they have a right to expect, at the very time when the work is most watched and will be most criticized? Do you realize that if he selects your equipment and plans its arrangement that blunders as bad as those already cited above will be made that will cost thousands of dollars to correct, and which, owing to the great cost, will likely never be corrected, thereby causing your teachers to labor under such disadvantages that effective and efficient work will never be done? School Authorities! Don't start in this way. Rather delay starting the work until you can pay a good man his price, or don't start at all. If you must have a cheap man, do not get him until the work is well under way.

#### Vocational Study in Kansas City.

Kansas City, Mo. Enrolling students for the fall term at the end of the school year in the spring, and the giving of high-school credits for vocational work done outside of school hours, are two innovations planned for the high school. The former work has been completed and has eliminated the waste formerly resulting during the first week of the fall term. Following the provisions of the second innovation, credits will be given for work done in music or other subjects pursued outside of school, upon the presentation of a certificate showing the number of hours devoted to the subject.

The vocational work will be extended to other lines as the different vocations offering employment are brought to the attention of the pupils. Practical work in banks and mechanical or industrial lines will be given proper credit upon the recommendation of the employers. The aim of the whole plan is to encourage useful activity in school, shop or office.





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**Not So Easily Cornered.**

Even when the son "inherits" his father's wit, as we say, his father may still keep his own, and on occasion even be able to cope successfully with his offspring. Dr. James B. Angell tells, in his "Reminiscences," the following enjoyable story of his college days at Brown University, under the presidency of Doctor Wayland:

The doctor's son, Heman Lincoln Wayland, one of my classmates, inherited from his father a very keen wit. The passages between father and son were often entertaining to the class. One day, when we were considering a chapter in the father's textbook on moral philosophy, Lincoln rose with an expression of great solemnity and respect, and said:

"Sir, I would like to propound a question."

"Well, sir, what is it?" was the reply.

"Well, sir," said the son, "in the learned author's work which we are now perusing, I observe the following remark"—and then he quoted.

The class saw that fun was at hand, and began to laugh.

"Well, what of it?" asked the father, with a merry twinkle in his eye.

"Why," continued the son, "in another work of the same learned author, entitled 'On the

Limitations of Human Responsibility,' I find the following passage."

He then quoted again. Clearly the two passages were irreconcilable. The boys were delighted to see that the doctor was in a trap, and broke into loud laughter.

"Well, what of it?" asked the doctor, and his eyes twinkled still more merrily.

"Why," said the son, with the utmost gravity, "it has occurred to me that I should like to know how the learned author reconciles the two statements."

"Oh," said the father, "that is simple enough. It only shows that since he wrote the first book the learned author has learned something."

**Following the Method Literally.**

The class were working in addition where one figure is carried. Up to this time the teacher had allowed the children to write the figure down that was to be added.

But this morning, thinking that all were familiar enough with the process, she insisted that the figure be retained in the mind.

Charlie, aged seven, worked faithfully and soon had 25 plus 25 equal to 40.

"Where's the one you were to carry?" asked the teacher.

"Why, you just told us to keep it in our heads and not write it down," said the indignant youngster.

**A Nose for the Truth.**

Exact truthfulness, according to a writer in the *Sketch*, had its proper reward in the following instance.

Teacher—Now, can you tell me what the olfactory organ is?

Boy—Please, sir, no, sir.

Teacher—Quite right.

**Correct Usage.**

A teacher asked her scholars to give a sentence using the word disarrange. An Italian boy submitted this: "My mudder she gotta da coal range. My fadder get up in da morning, make da fire he say, 'Damma dis a range!'"

**What He'd Do.**

A pupil in a Maine school failed to give the correct emphasis when reading the sentence, "That is my dog."

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 Jersey City, N. J.

Wishing to help him, the teacher asked:

"Charlie, if you were playing with your dog and another boy should come along and try to take him away from you, what would you say?"

"I'd lick him," was the emphatic answer.

**Our Difficult Language.**

A manikin's a little man—  
 That simple fact no one would stump;  
 But a napkin's not a little nap  
 And a pumpkin's not a little pump.

A starling is a little star—  
 That's very plain to any chump;  
 But a stripling's not a little strip  
 And a dumpling's not a little dump.

Now, silkline is nearly silk—  
 That any fool could quickly guess;  
 But pearline's nothing like a pear,  
 Nor messaline almost a mess.

A kidlet is a little kid—  
 That's seen by e'en the dullest mut;  
 But a hamlet's not a little ham,  
 And a cutlet's not a little cut.

A princess is a lady prince;  
 But it is not held by any bloat  
 That a mattress is a female mat,  
 Or a buttress is a nannygoat.

Oh, English, you are strangely made!  
 You're not a tongue for gumps or fools!  
 I'll never master you, I'm 'fraid—  
 You've more exceptions than you've rules!  
 —Judge.

**High School Wisdom.**

Senior—"I say, Soph, have you a footrule over there?"

Sophomore—"Yes; one that Principal Jones made. It is: 'Use the doormat before entering.'"

Senior—"Oh, that won't do. That's a two-foot rule."

Miss Primer—"How is your pedagogy round table getting on?"

Miss Grammar—"Famously. We've got two members now who seem to understand G. Stanley Hall."

**Understudy.**

"You look tired, young man; are you overworked?"

"I'm studying for a teacher, sir."

"Well, why don't you let her study for herself?"

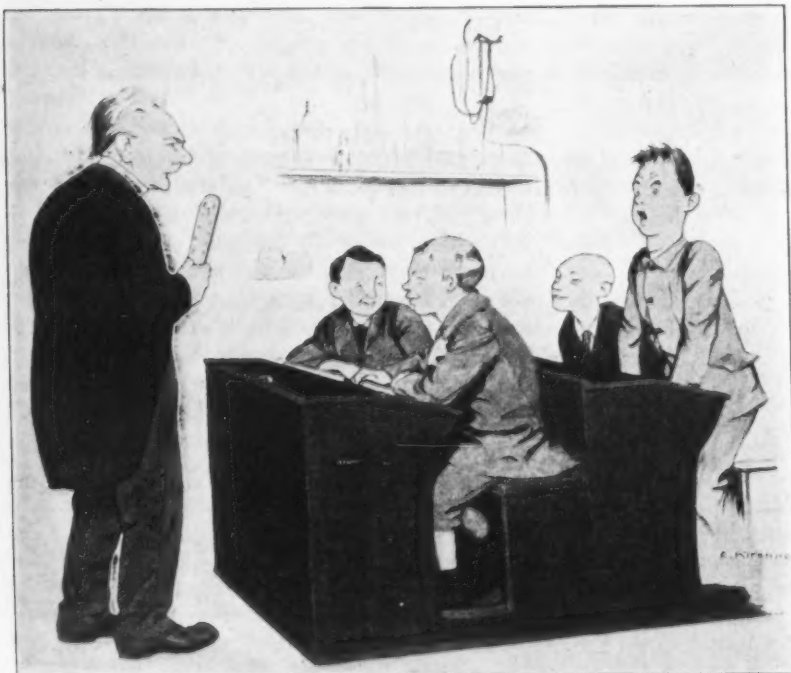
School Trustee—"We've come to see if you'll subscribe anything to the village school."

Householder—"Good heavens! I've subscribed five children already."

**Usual Distinction.**

Lehrer—"Was ist eigentlich der Unterschied zwischen einem Dialog und einem Monolog?"

Hans—"Mein Vater sagt, 'Wenn zwei Frauen mit einander sprechen, so ist es ein Dialog, wenn aber eine Frau mit ihrem eigenen Manne spricht, so ist es ein Monolog!'"



Teacher:—(explaining the thermometer) "Here we see the letters F. P.—they represent the temperature at which water freezes. Now, if the column of mercury rises to the temperature of 216 degrees, it reaches the boiling point of water, designated by the letters B. P. If the temperature rises still higher the thermometer is likely to burst. Pay attention, Max, what does B. P. designate?"

Max:—"Busting Point, sir."—Fliegende Blaetter.

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The names given below are those of the leading and most reliable School Supply Houses and Publishers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms. If any desired item cannot be found listed, write to Wm. Geo. Bruce, Publisher, Milwaukee, Wis.

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Chicago Apparatus Co. .... Chicago  
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American Crayon Co., Sandusky, O.  
Economy Drawing Table Co., Toledo, O.  
Devoe, Dept. 5, Chicago  
The Prang Co., New York  
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Colonial Crayon Co., Akron, O.  
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Meneely Bell Foundry, Watervliet, N. Y.  
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A. H. Andrews Co., Chicago  
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Standard School Supply Co., Grand Rapids, Mich.  
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Dow Wire & Iron Works, Louisville, Ky.  
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Haney School Furniture Co., Grand Rapids, Mich.  
Standard School Supply Co., Grand Rapids, Mich.  
American Seating Co., Chicago  
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A. J. Nystrom & Co., Chicago  
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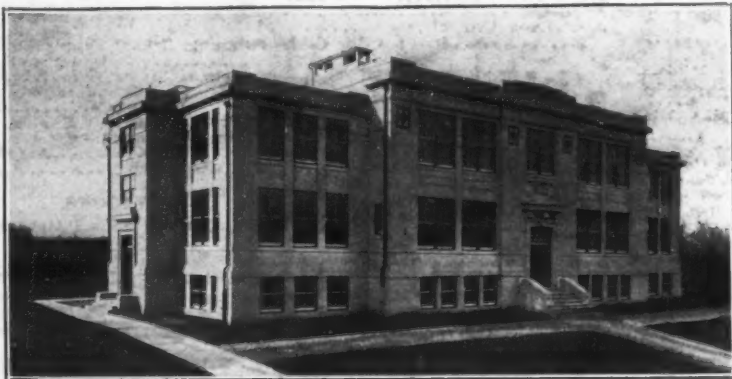
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